

DOCUMENT RESUME

ED 360 892

HE 026 625

AUTHOR Conklin, John J.
TITLE The Development of Strategic Plans for Implementing Distance Education in Social Work Education.
PUB DATE Jun 93
NOTE 197p.; Ed.D. Major Applied Research Project, Nova University.
PUB TYPE Dissertations/Theses - Doctoral Dissertations (041)
EDRS PRICE MF01/PC08 Plus Postage.
DESCRIPTORS Administrator Attitudes; Adult Education; *Curriculum Design; *Distance Education; Graduate Study; Higher Education; Institutional Characteristics; Library Research; Masters Degrees; *Pilot Projects; Professional Education; Program Development; *Social Work

ABSTRACT

This research project developed two strategic plans for distance education in social work. The project involved use of a developmental problem-solving methodology, creation of a conceptual framework thorough a literature search, visits to sites that use distance education, consultations with experts, and attendance at local and national conferences. In addition the project resulted in the initiation of a pilot training program at the University of Connecticut (UConn) School of Social Work which included lectures and development of a technology and a 15-minute videotape. Administration of an effectiveness questionnaire with 57 students indicated a positive response to the UConn program. A questionnaire responded to by 96 directors of field education in Canada and the United States indicated that not many schools of social work are currently using distance education though some social agencies are beginning to use distance education. Overall the project concluded that distance education can enhance social work education, that it is already being used by other professions, that it has no geographic, physical or temporal limitations, and that it can be used to restructure social work education. Appendixes contain the UConn plan, the student questionnaire, and information on curriculum and teaching, costs, and evaluation. Contains more than 200 references. (JB)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

THE DEVELOPMENT OF STRATEGIC PLANS FOR IMPLEMENTING
DISTANCE EDUCATION IN SOCIAL WORK EDUCATION

John J. Conklin

A Major Applied Research Project presented in
partial fulfillment of the requirements for
the degree of Doctor of Education

Nova University

June, 1993

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

* Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

JOHN J. CONKLIN

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

HE 026 625-

ACKNOWLEDGEMENTS

The amount of study, effort, and writing required for the Major Applied Research Project (MARP) is prodigious. An excellent team was composed of my wife, Joyce, who encouraged me to go to Nova in the first place, Kathleen, my daughter the research assistant, Michael, my son the videographer, and my friend Jeffrey Pandolfo, the computer expert. Patient librarians from the Trecker Library and the Central Connecticut State University Library helped in many ways. My friend Dean Schneck from the University of Wisconsin provided support and much wise counsel during tough political times at the local campus.

Dr. Diane L. Paul was my constant, trusted, guide and supporter. Dr. Ross E. Moreton offered special direction through his natural leadership. All of the faculty were excellent but Dr. Warren H. Groff, my MARP advisor, was the most challenging and inspirational of all. He is the one who introduced me to the world of the future and a new challenge, technology.

I am grateful for the support from fellow classmates in the Nova program. We were the pioneers who helped the new Massachusetts Cluster get started. I owe much to all of the staff, faculty and students in

the Cluster for their support during the important
"Nova Experience." It really changed my life.

Abstract of a Major Applied Research Project Presented
to Nova University in Partial Fulfillment
of the Requirements for the Degree
of Doctor of Education

THE DEVELOPMENT OF STRATEGIC PLANS FOR IMPLEMENTING
DISTANCE EDUCATION IN SOCIAL WORK EDUCATION

by

John J. Conklin

June, 1993

The United States is in transition from a post-industrial era through an early technical stage into an advanced technical era. Rapid advances in research and development, particularly in communications and information technology, yielded widespread global restructuring in the manufacturing sector of the economy in the 1970's and 1980's, a trend that will continue in the decade of the 1990's.

The services sector of the economy is beginning to restructure, particularly in education, health, and human services. The problem is that social work education is lagging behind in the use of information and communication technologies.

The purpose of the Major Applied Research Project (MARP) was to develop two strategic plans for distance education. One was presented to the Educational Policy Committee of the University of Connecticut School of Social Work (UConn). The other was presented at the Council on Social Work Education (CSWE) annual meeting to the North American Field Educators and Directors Network Steering Committee (NAFEDN) in New York City, in February, 1993.

For the MARP, a developmental problem-solving methodology was used. A conceptual framework was created through a literature search, visitations to sites which use distance education, consultation with experts, plus local and national conference attendance. A pilot training program was started at UConn which included lectures, a technology manual, and a 15-minute videotape. A questionnaire was administered to measure the effectiveness. The response rate was 91%. Students can be trained effectively in distance education through a pilot training program.

A second questionnaire was sent to the directors of field education at 124 graduate schools in Canada and the United States. Questions were posed about distance education, planning and technology used by

schools of social work, universities and practicum agencies. The response rate was 75%. Not many schools of social work are using distance education. Media facilities at the universities can be used for distance education. Some social agencies are beginning to use distance education.

Four conclusions were reached. Distance education can enhance social work education. Second, it is already being used by other professions. Third, distance education has no geographic, physical, or temporal limitations. Fourth, distance education can be used to restructure social work education.

The recommendations came from the focus on adult learners, distance education, and the need to restructure social work education. It is recommended that: (a) UCONN begin to use distance education, (b) NAFEDN begin to use distance education to modernize teaching, and (c) distance education be used to keep social work teaching current with educational advances in the information age.

TABLE OF CONTENTS

	Page
LIST OF TABLES	11
LIST OF FIGURES	12
Chapter	
1. INTRODUCTION	13
Background and Significance	16
Research Questions	21
Definition of Terms	22
Assumptions	26
Limitations	26
2. REVIEW OF THE LITERATURE	29
Adult Learners	29
Technology and Distance	
Education	37
Restructuring of Social Work	
Education	45
Summary	50
3. METHODOLOGY AND PROCEDURES	52
Developing the Conceptual	
Framework	52
Pilot Training at the University	
of Connecticut School of	
Social Work	60

The University of Connecticut	
School of Social Work Plan	
for Distance Education	64
Developing the North American	
Field Educators and	
Directors Plan for	
Distance Education	67
The Strategic Plan for the North	
American Field Educators and	
Directors Network	69
4. PRESENTATION OF RESULTS	72
The Conceptual Framework	72
Pilot Training at the	
University of Connecticut	
School of Social Work	75
The University of Connecticut	
School of Social Work Plan	
for Distance Education	79
Developing the North American	
Field Educators and	
Directors Plan for	
Distance Education	82

The Strategic Plan for the North American Field Educators and Directors Network	92
5. DISCUSSION, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS	95
Discussion	95
Conclusions	100
Answers to the Research Questions	105
Implications	107
Recommendations for Implementation, Dissemination, and the Improvement of Practice	111
BIBLIOGRAPHY	114
APPENDIXES	133
A. Student Questionnaire	134
B. The University of Connecticut School of Social Work Plan	136
C. Curriculum Materials and Teaching Strategies	145
D. Analysis of Average Costs	154
E. Evaluation Strategies	162

F. Letter from North American Field Educators and Directors Network	168
G. Letter of Support	170
H. Letter of Transmittal	171
I. North American Field Educators and Directors Network Questionnaire	172
J. The Strategic Plan for the North American Field Educators and Directors Network	178
BIOGRAPHICAL SKETCH OF STUDENT	195

LIST OF TABLES

Table	Page
1. Results from Training about Distance Education, Telecommunications, and Library Research	78
2. Results from Questions about the Use of Technology by Social Work Practicum Agencies and the Type of Agency	79
3. Technology Used at Schools of Social Work	84
4. Technology Used at Universities	86
5. Technology Used at Field Agencies	89
6. Demographic, Regional, and Sponsorship Data	91

LIST OF FIGURES

Figures	Page
1. Global Technologies Enterprises	
Estimate of Equipment Costs . . .	157
2. Linking Instruction and Assessment	
Implications from Cognitive	
Learning Theory	163
3. Assessment Alternatives	164
4. Framework for Total Quality	
Management Plus	166

Chapter 1

INTRODUCTION

The United States is in the midst of a transition from a post-industrial era through an early technical era into an advanced technical and communications age, termed the "information society" (Groff, 1986). Rapid advances in research and development, particularly in communication and information technology resulted in the widespread restructuring of the manufacturing sector of the economy particularly in the 1970's and 1980's. This trend in restructuring is expected to continue through the 1990's and extend beyond manufacturing to the service sector.

The United States expanded social services in an attempt to improve the quality of life in the 1950's and 1960's. Many social agencies were created and enlarged through federal and state legislation to improve human conditions, particularly for the disabled, elderly, poor, and the young. Social work programs were created and expanded to supply the workforce for these establishments. Throughout the Great Society era, the federal Department of Health, Education, and Welfare, now Health and Human Services, provided fiscal support through various grant programs.

On October 17, 1979, the "Department of Education Organization Act" (Public Law 96-88) created the United States Department of Education. Since then, schools of social work must follow policies and regulations from both the Department of Health and Human Services and the Department of Education.

During the same decades, the United States also created the world's largest research and development infrastructure which advanced science and technology. The manufacturing sector of the economy began to modernize through the use of contemporary technology. Then, several other sectors of the economy began to restructure through know-how and technology.

The nature of the problem is that social work schools fell behind other establishments in the use of state-of-the-art technology to prepare students for the workplace in the year 2000. Didactic classroom work, practicum education, and continuing education programs continue to be offered in traditional ways with only a few technological enhancements.

While technology and distance education are being used by other professions like medicine, nursing, education, and psychology, social work has been slow to do so. Cnaan (1989) notes that social work education

has not made any major efforts to adopt the new information technologies for use in practice. Jones and Wright (1986) advocate that higher education should develop a focus on technological alternatives in dealing with the identifiable problems of humankind. They suggest that a multidisciplinary approach should be taken for social problems and issues which would be aided through the use of technology.

The purposes of this study were to develop two strategic plans to encourage the simultaneous use of distance education in social work educational programs at both the local and national levels. Specific methods of study were developed including a literature review, visits to sites which use distance education, and the development and analysis of two questionnaires, as part of the Major Applied Research Project (MARP).

From the institutional perspective, both locally and nationally, a justification was developed for this study through the methods described above. The first strategic plan was for the University of Connecticut School of Social Work (UConn), a regional school which provides education at the Master of Social Work level.

The second plan was for the Steering Committee of the North American Field Educators and Directors

Network (NAFEDN) to initiate distance education. Since this committee is composed of 14 top social work field education leaders in Canada and the United States, it was thought that they would have an influence on educational policy-making at the international level.

More than 500 schools of social work belong to the Council on Social Work Education, an accrediting body which has an Annual Program Meeting (APM). The 1993 APM was held in New York City. Thus, an opportunity developed to introduce a plan about the use of distance education to the NAFEDN Steering Committee members who attended the CSWE Conference.

Background and Significance of the Problem

When considering the slowness of technological adaptation in social work education, at least three concepts must be considered. One concerns the need for the profession to adapt rapidly to changing societal factors. A second concerns the restructuring needed for the educational leaders of the profession to adapt to those changes. The third concerns the opportunity to modernize and enhance social work teaching through distance education.

Many problems concerning technology and social work education can be related to rapid social,

economic, and demographic changes which are now taking place. America is shifting from an industrial society to an advanced technical society (Duderstadt, 1992).

Groff (1987a) reports that

The United States is in transition from an industrial society to a complex scientific and technological society based on communications and information technology. The new society will require more sophisticated intellectual capital and a workforce that is skilled in new ways. These needs will demand the formation of new expanded relationships between postsecondary education, the economy and society (p. 1).

Social work education has not adopted technology intensive teaching methods. It has continued to educate providers of humanistic services in traditional ways through the lecture-discussion format in class and the supervisor-supervisee model in the field agencies.

Historically, the profession began through the provision of charity services, philanthropy, and helping people who had personal and environmental problems (Germain, 1979). Consistent with that mission, distance education and technology can be used

to update and strengthen teaching methodology. It can produce improvements in education without the numerous limitations posed by geographic distance.

Opportunities exist for social work educators and social agencies to use distance education to create a more responsive professional workforce. Pautler (1990), Parnell (1990), Naisbitt and Aburdene (1990), and Johnston & Packer (1987) address these opportunities. The potential for further development through distance education can be realized through visionary thinking about the future.

To consider many related educational dilemmas, Groff (1983, 1990a, 1991) advocates modernization, restructuring, futurism, future-based strategic planning, and streamlining in preparation for educational practice in the year 2000. This is a theme which other writers such as Carlson and Goldman (1991), Verduin and Clark (1991), and Kouzes and Posner (1991) also support in their work.

Social work education must join with other teaching professions in responding to global human resource development issues and changing societal factors during the transition to the information age. Other education professional have already started a

global network of distance education facilities. Bates (1989b) describes the establishment of the European Electronic University. Kieselev (1993) writes about the growing use of technology for education in the Soviet Union. Carl (1984) describes the creation of satellite courses in the Canadian provinces.

If social work education does not respond to the opportunities offered by technology enhanced teaching, a more serious problem can develop. Cnaan (1989) argues that unless social work education becomes involved quickly, the profession may eventually miss the opportunity to shape the new technology according to its own ethics, goals, and values.

At the same time, suggesting that social work should incorporate technology into its mission has raised some expressions of concern. Reamer (1986), a social work ethicist, addresses this by noting that the use of modern technology can cause ethical dilemmas. However, if technology were used in the "...cautious hands of conscientious professionals, it has the impressive capacity to enhance the lives of the people we aim to help" (p. 471).

Distance education is one form of technology which can become very important for social work. Distance

education may be defined as teaching which is performed when a majority of the instructional process is performed with the instructor and the learners at some geographical distance from each other. While the primary technological medium is interactive television, other media are also used for communication including audio and video tapes, fax machines, computers with modems, electronic mail, and the telephone.

Jennings, Siegel, and Baskin (1992) and other writers such as Raymond (1988) report about the educational potential of distance education. The new technology can be used to assist in the creation of new theories and practices. Distance education can be used to disseminate educational information anywhere in the world very rapidly.

While distance education is being used by other professions like education (Falk and Carlson, 1992), psychology (Shapiro and Hughes, 1992), nursing and medicine (Kuramoto, 1984), social work education has not begun to use it to any great extent. No literature was found which indicated that major research has been done leading to strategic planning for social work education. Therefore, the purpose of the MARP was to develop two plans to introduce distance education to

social work education. Specific emphasis was placed upon practicum education to prepare social work graduates for employment in the workplace.

Research Questions

As a direct result of the above observations that led to the MARP, several major conceptual issues were identified which were used as a focus of analysis. These included the fact that graduate social work students are adult learners. Also, the profession needs to improve and enhance the teaching process through the use of distance education as other educational institutions have begun to do. Finally, social work education needs to be restructured to meet changing societal trends and issues.

The first questionnaire developed was administered to students at UCONN. They were introduced to a pilot training program on distance education, so a pre-test and post-test were administered. Four sets of test questions were designed to determine whether there was any measurable difference in student attitudes about technology and distance education, what the level of their knowledge about technology was, the use of technology by their social agencies and the type of social agency they worked in for their practicum.

The second questionnaire at the national level, considered the following research questions:

- (a) How are graduate schools of social work in Canada and the United States using distance education?
- (b) In what ways are the schools planning to use distance education?
- (c) What training approaches can be used to teach social work practicum directors about the methods and significance of distance education?
- (d) What overall plan can be developed to implement distance education in schools of social work?
- (e) How can the effectiveness of distance education be measured in the classroom and in the practicum?
- (f) How can the educational effectiveness of distance education in the institution be measured?

Definition of Terms

Several terms are defined to add clarity to the HARP. The terms and their definitions follow:

Digital Libraries

Digital libraries are databases that store text, video, imagery and sound.

Digital Video Effects

These are digital video effects produced during live video productions.

Distance Education

This term refers to an educational process during which the student and teacher are separated much of the time. It is performed under formal educational auspices. Various educational media including interactive television are used to provide two-way communication for the teacher, or educational agency and the student. Verduin and Clark (1991) define distance education as "... formal learning which occurs when a majority of the instruction is performed with the educators and learners at some distance from one another" (p. 8).

Field Education

This term as well as practicum education refers to the internship portion of the social work curriculum. Students are placed in social work agencies to complete the applied portion of their professional studies while under the supervision of a practicum instructor.

Field Education Director

This term refers to the educators who direct the practicum program at each school of social work in Canada and the United States. They perform both an educational as well as an administrative function.

Field Educator

This is a generic term which may refer to faculty members who provide advisement to the student. It may also refer to the practicum instructors who provide educational supervision.

Future-based Strategic Planning

This term is based on Groff's (1992) description of preparing strategic thinkers for building learning communities. The conceptual framework is used to describe the essential role of higher education as society evolves into the information age.

Futurism

This term is used by Groff (1983) regarding strategic planning in higher education which includes the "... gathering of demographic, social economic, and governmental trend analysis to develop specific scenarios" (p. 5). These are related to changing societal trends and issues, including shifting demographic patterns.

Restructuring of Education

Groff (1986) defines this concept in reference to the transition to an advanced technical society in the United States. This requires the "... redesign and restructuring of the educational and training system"

(p. 9). The restructuring should be done through planned systematic change based on a vision of the future, and good theory and research. It requires solid national and state policies, visionary leadership, and the cooperation of a broad range of educational institutions to realize these visions for the future. O'Neil (1992) adds that "The educational system must reorganize around some essential, far-reaching outcomes that all students need to attain to be successful after graduation" (p. 5).

Social Work Education

This refers to social work higher education programs for the teaching of theory and practice at the bachelor's, master's, and doctoral levels. It includes both class and practicum teaching.

Technology

This refers to the use and development of a variety of educational media including but not limited to the mail, telephone, audio and video recorders, computers, modems, electronic mail, telecommunications, fax machines, and distance education. In this study, it also includes various videotaped materials and interactive programs which use satellite dishes, satellites, fiber optic cables, and microwaves for

transmission of educational programming which can be used at any educational level.

Telecommunications

This is defined as the electronic connection between a receiver and a sender.

Assumptions

The following assumptions were made. It was assumed that technology-based distance education techniques will strengthen social work education. It was assumed that the survey participants would provide accurate answers to the questionnaires. It was assumed that the survey form was clear and would provide adequate data for the study. Also, it was assumed that there is a need for the use of technological advancement in social work education as there is in other higher education programs. Finally, it was assumed that the literature searches done for this study produced accurate information about trends in distance education at the present.

Limitations

Three limitations of the study concerned (a) the specific focus on graduate level social work education, (b) the focus on distance education literature, and (c) the specific readings about telecommunications. These

foci could contribute to a limited point of view concerning a specific type of education.

The first limitation concerns the lack of use of distance education by many schools of social work due to expense. However, Purcell (1992) notes that the costs of technology are decreasing significantly. Also, powerful technology is already being used by other schools of higher education.

Some social work schools have begun to use distance education. Raymond (1988) writes that social work education and training have begun to use interactive television for continuing education to social workers in rural areas.

A second limitation concerns the specific choice of distance education literature that was reviewed. A large amount of literature on the topic is developing under a variety of auspices. Choices of the literature reviewed were based on the relationship to higher education. Additional literature may be available that was not been identified by computer searches or has not been copied in electronic databases.

A third limitation concerns other sources of information such as interviews, site visits, and telecommunication conferences. The distance education

learning programs which were reviewed for the MARP in educational institutions and the business sector have characteristics that are unique to the individuals in the organizations who designed them. Additional educational and business models could have been reviewed. However, the models selected were most closely related to graduate social work education.

Chapter 2

REVIEW OF THE LITERATURE

The literature search was organized around three large conceptual frameworks which are sub-divided by topic. The first of these concerns adult learning, termed androgogy by Knowles (1992). The second refers to the study of technology and distance education. The third conceptual framework is related to the need to restructure social work education to meet some of the challenges of the 1990's. These are linked to social, economic, and demographic trends and the rapid development of the information society.

Adult Learners

The literature revealed an important aspect of graduate social work education related to the present study. This concerned the chronological age of the social work student body. Students at the MSW level are sometimes termed nontraditional in the sense that they did not go directly to graduate school from their undergraduate educational experience. Upon examination of the Council on Social Work Education (CSWE) Annual Statistical Report (1991), four groups of students were identified: those 25 and under, those 26 to 30, the 31 to 40 year olds, and individuals who are 41 and over.

Within these groups, there are additional subcategories. Some students attend graduate schools of social work immediately following undergraduate school. Among these individuals, some have taken the BSW degree while others have taken various other liberal arts and professional degrees. Specific percentages of those cohorts are not kept by the CSWE.

In the 26 to 30 year old group, some have undergraduate social work degrees, while others have liberal arts and other degrees. Also, some have been employed in social work agencies and some in other contexts. Therefore, some students are making a career change while others are upgrading their professional social work skills by taking an advanced degree (T. Conyers, personal communication, November 29, 1992).

The situation is similar in the 31 to 40 and 41 and over groups. At UCONN, the greatest number of students are in these groups. Most are returning to school after having had several years of social work experience or employment in a variety of similar contexts. For many, this represents an opportunity for promotion and career advancement after graduation.

The study of demographic data indicates that adult learners are returning to colleges in large numbers

throughout the country. A United States Department of Education projection indicated that in 1988 alone, 46.6% of all students enrolled in higher education were over 25 years of age (Steffen, 1988).

Several authors refer to this group by a variety of terms. Coughlin (1989) calls them "adult independent learners" (p. 159). Garcha and Gatten (1990) refer to them as "non-traditional university students" (p. 13). Tomaiuolo (1990) names this group "adult re-entry students" (p. 49).

Groff (1992) speaks of preparing proactive visionary thinkers for the learning communities of the future. At a nontraditional university setting that offers field-based, practitioner-oriented doctoral programs, concepts regarding leadership skills are taught simultaneously with research and strategic planning. The result for adult learners is a significant change in attitude and competency.

Andragogy is one of the terms Sheridan (1986) uses to describe the educational process for adult learners. This process is based upon concepts and learning principles that differ from the more familiar pedagogical techniques for teaching children. Knowles (1992) suggests that adults can be self-directed

learners since they are accustomed to performing tasks independently at home and at work. He also notes that they work together well in teams where collaboration is essential. Also, education of adults in the future will be based more on the measurement of performance and competencies rather than on specific criteria.

Sheridan (1986) amplifies this by suggesting that special guides should be developed for adult learners. In the guides, instructions should be given in a non-directive style because adults are basically self-paced independent learners. They are capable of performing assignments with a minimum of direct supervision in the performance of tasks.

Scope of Social Work Education

The preparation of adult learners as social workers has become a sizeable endeavor at several academic levels in the contemporary educational system. This includes the teaching of social work courses at the two-year, bachelor's, master's, and doctoral levels. It also includes professional development, continuing education programs, plus training and instruction. Some specific facts about the extensive scope of social work education in this country will

provide an overview related to higher education at the present time.

The literature indicates that more than 500 accredited social work programs award the Bachelor of Social Work (BSW), Master of Social Work (MSW), and the Doctorate of Social Work (DSW) to adult learners. In graduate schools, 19,468 full-time and 10,232 part-time students were enrolled in 1991. (Council on Social Work Education, Annual Statistical Report, 1991).

At the baccalaureate level, 379 programs were accredited to award the BSW degree. At the graduate level, 111 programs were accredited to grant the MSW degree. Forty-nine schools grant the doctorate (Council on Social Work Education, Annual Statistical Report, 1991).

At the two-year college level, many courses are related to social work. Although national figures were not found, in Connecticut, 1333 students took social work courses at 13 community colleges in programs known as "human services," "social work," "social services," and "mental health," to name a few (Conklin, 1992e).

Social work programs require varying proportions of classroom work, practice, and research, depending

upon the degree. At the undergraduate level, most of the learning experiences occur in the classroom with some field work and a little applied research.

At the graduate level, approximately two-thirds of the required 60 credit hours are in classroom work. This includes more research than at the undergraduate level. The remainder of the credits are awarded for the practicum work completed under the educational supervision of an agency social work professional.

At the doctoral level, the academic program is composed chiefly of classroom work with emphasis upon basic research. With the exception of several clinically oriented programs, less emphasis is placed on field education than at the MSW level.

UCONN is located in West Hartford, a suburb of one of the 10 poorest large cities in the nation. Hartford has a population of over 100,000. It matches several other Connecticut cities like Bridgeport and Waterbury in terms of poverty, unemployment, and crime statistics (Conklin & Borecki, 1987).

At the West Hartford campus, 379 matriculated and 520 non-matriculated part-time social work students are enrolled in the Master of Social Work program (personal communication, T. Conyers, March 23, 1993). The social

work degree requires 40 credit hours of classes and 20 credit hours of practicum which are completed through internships in community agencies throughout New England. Theory is taught at UCONN based upon solid research studies which lead to analytically-based social work practice interventions.

The provision of both educational and human services tend to be state functions. Thus, the laws, policies, and organizational structures of social work agencies which offer practicum education tend to vary somewhat from state to state. However, the overall educational expectations of agencies are similar throughout the United States as they are closely regulated by accreditation standards of the CSWE.

This leads to both an opportunity and a crisis for social work education related to teaching via distance education. The opportunity comes from the increased emphasis by the National Science Foundation Network (NSFNET) and the National Research and Education Network (NREN) program for higher education institutions. Social work schools need to be included in research, library, and university networks. A crisis can emerge if social work education does not quickly begin to become conversant with technology

supported education. As Cnaan (1989) notes, information technology can become institutionalized in a way that could leave social work out-of-date.

Professional groups other than social workers may produce programs which carry a different type of philosophical message. Already, many human resources development programs are being produced on topics similar to those taught in social work schools. Some of these include works on developmental theory, parenting skills, communication, employee assistance programs, trends, stress management in the workplace, sexual harassment, and similar topics. However, they are designed to enhance the production of workers in businesses rather than to serve the clients of the non-profit sector in social agencies.

Related to this point, the goals of educating social work providers can be facilitated through distance education. Specific teaching can be provided via interactive television throughout New England and beyond for self-directed adult learners. Homework assignments can be performed by the adult learners on an independent basis. The completed work can be sent to the faculty member through e-mail, by fax machine, or by a computer with a modem and local area networks.

Technology and Distance Education

Social work education has not incorporated a large quantity of distance education into the education of professional students. However, at a university which has begun the use of distance education, Ostertag (1991) suggests that if postsecondary institutions are to keep up with demographic changes, they must use a combination of traditional and non-traditional approaches to learning. She recommends an integrated multi-technology distance learning environment in which fax machines, video and audio tapes, telephones, e-mail, interactive computers, the mail system, and traditional lectures are blended.

Rich (1991) notes that research suggests that the effective integration of technology will make education more productive, immediate, relevant, accessible, and responsive to special needs. It will also provide a more scientific base for learning as well as a number of significant opportunities to do research into various forms of educational instruction.

Information and Technology Act

Other information from the literature search concerned additional references to technology for educational purposes. For example, while still a

Senator, Vice-President Albert Gore (1992) presented a floor statement to the Senate regarding the Information Infrastructure and Technology Act. This bill is part of the second stage of the High-Performance Computing Act of 1991, established by Public Law 102-194. Aimed at revitalizing the research and technology base of the country, the program will create new applications of high performance computing for education, libraries, manufacturing, and health care. A scientific infrastructure in which information can be shared instantly is now possible.

National Science Foundation Network

Greater numbers of schools are being linked through the NSFNET. They, in turn, will be connected to digital libraries of information, including the Library of Congress. At the university level, the program will provide educational software, teacher training, and health care education for hospitals and universities through the NSFNET. This networking technology will be linked to the National Institute of Health. Digital libraries which store text, video, and imagery, will be accessible through the NSFNET.

Some of the literature reviewed offered world-wide opportunities for educators and scientists to share

teaching materials and discoveries. Berenfeld (1992) describes the desire of many Russian educators to make contact with Western colleagues now that the Iron Curtain has fallen.

Hayman (1993) raises the need to bridge the technology gap in the higher education system in Africa. He notes that leaders of the country look to the information technologies to provide the data and approaches they require to improve their system.

Both of these articles highlighted a global mission which is of great interest to social work educators. This is related to the desire to provide more educational services to developing countries. Educators in social work often travel to Third World countries during sabbatic leaves (B. Dicks, personal communication, September 14, 1992). During the visits to various countries, they are often asked to provide input about social work education in the United States. Distance education could be used to beam a variety of educational programs to many countries to accomplish this goal.

From a global perspective, Duderstadt (1992) echoes the comments of Groff when he notes that a new post-industrial knowledge based society is emerging in a

manner reminiscent of the evolution of an industrial society from the agrarian culture 100 years ago. As an example of this progress, he noted that the NSFNET now has 650 colleges and universities connected with each other. This encompasses more than 80% of the nation's student population and includes 90% of the nation's federally funded research facilities. It connects over 5000 networks worldwide and is growing at the rate of 11% per month. This could be a major opportunity for social work educators to use in the creation of a system of international education.

National Research and Education Network

NSFNET is the precursor to another more dramatic effort in the form of the (NREN). This is a technology-based network that was designed to expand and enhance the American portion of the existing worldwide infrastructure of interconnected computer networks known as Internet. All of these facilities are dedicated to much higher speed transmission of information for scientists, researchers, educators, and business leaders throughout large geographic areas.

Duderstadt (1992) notes that in the NREN system ... elementary schools, high schools, two-and four-year colleges, and universities will be linked together with research centers and

laboratories so that all may share access to resources such as libraries, databases, and diverse scientific instruments, such as supercomputers, telescopes, and particle accelerators (p. 38).

Social Work Education and Technology

Several social workers have begun to experiment with the transmission of social work courses over interactive television. Some of the pioneers, Jennings, Siegel, and Baskind (1992), note that today's social work students will be practitioners in a more global and pluralistic society which will be very different from what their instructors know. Even in the two years that social work educators have to teach students, the best they have to offer will not be sufficient to meet the demands of future practice.

The authors predict that if students are to be able to shape their future practice, they must comprehend the value of being active participants in the learning and knowledge building process. They emphasize that interactive video instruction facilitates this learning. Both social work students and social work educators can learn to use the technology with a brief amount of instruction. It is

not necessary to be a technologist to teach in front of a camera. Some additional amount of classroom preparation is needed for the making transparencies, charts, and graphics which are used as supports for the teaching process.

Building upon the predictions about the NREN and NSFNET, the infrastructure progress which is possible can be applied to the teaching of social work at all academic levels. At the implementation level, one of the instructional dilemmas in social work education has been the integration of theory and practice. Vayda and Bogo (1991), field educators from two Canadian schools, suggest that the melding of theory and practice has always been an objective of social work education that has been difficult to achieve. Many concepts learned in the classroom are difficult to apply in practice and sometimes appear irrelevant to students who are learning practice practice skills. They propose a model for integration which is similar to the "context-input-process-product" model of Stufflebeam (1971), a continuous cybernetic loop.

Distance Education

Distance education can be used by schools of social work and practicum agencies to bridge this gap.

Using interactive television as a medium, the integration and enhancement of classroom theory and field education practice can be facilitated. Live case conferences can be transmitted simultaneously between social agencies and the social work schools about actual client situations.

Schneck (personal communication, September 22, 1992) comments that technology offers an opportunity to respond to the inductive nature of field and practice as students and practitioners alike reach for applicable knowledge and guidance. A grand rounds format could be established in which students and practitioners might seek counsel from other professionals regarding new and emerging problems.

A technology-enhanced clinical integrative seminar could be created if students and field educators from around the country or around the world were connected through interactive television. Ideas, information, and experiences could be shared rapidly in real time. This type of educational experience is a very different paradigm than taking classroom knowledge to see if it fits somewhere in the field practicum.

The literature suggests the possibility that distance education could contribute to the integration

of theory and practice since case materials could be shared instantly and interactively for problem-solving. One model is a live discussion with clients related to real-life problems. This is already done in medical education seminars on public broadcasting stations.

A rebuttal to using distance education could be raised in reference to confidentiality and client rights. However, teaching conferences can be focused on carefully disguised case material. Also, informed consent procedures are available for those individuals who have no qualms about discussing their life dilemmas on interactive television. In some cases, clients wish to be clearly identified so that their testimony may be of some help to others who have the same problems (M. Libassi, personal communication, January 21, 1993).

Technological approaches such as "digital video effects," animation, or backlighting can be used to disguise the appearance and voices of interviewees. Over time, additional approaches to solving this dilemma will be developed (T. Davies, personal communication, December 8, 1992).

The latest approaches to professional video production, such as the nine separate programs which are part of the in the Video Toaster 2.0. are described

by Avergakis (1992). This technology has significant potential for the enhancement of teaching and the production of studio quality educational videos at low cost. Students could view teaching tapes at home. Or, tapes can be broadcast via satellite transmission.

Restructuring of Social Work Education

The third conceptual framework studied in the literature search concerned the need to restructure social work education to meet the needs of a rapidly changing information society. Demographic studies by Levine and Associates (1990) and writers like Naisbitt and Aburdene (1990) have pointed to the major societal changes which are taking place. For example, the recent national economic retrenchment has caused major problems for many client groups at risk. Rising health care costs and the spread of AIDS have had a profound impact on research studies and practice interventions.

A complex answer to rapid societal changes is that social worker teachers need to restructure the education of students for practice with an increasingly diverse population. A related question for many social work administrators and deans is how to deliver both services and education at lower costs because to recent funding cutbacks.

Total Quality Social Work Education

A specific answer would be to utilize the principles of W. E. Deming (Forsha, 1992) known as "Total Quality Management" (TQM) in concert with distance education. The approach can be used as effectively in social work education as it has been in other branches of American education and the business community (Bonstingl, 1992).

Deming's "fourteen points" include constancy of purpose, a new philosophy, on-the-job training, education and self-improvement, and transformation plus leadership (Walton, 1990). Applying these principles to social work higher education, a total quality approach could provide efficient and effective delivery of educational services at a reduced cost. This could be closely related to the outcomes sought in social work education at the BSW, MSW, and doctoral levels. The curricula for classroom and practicum education would need to be audited closely relative to the outcomes. This is related both to the increasing numbers of culturally diverse clients at risk and the changing information society.

Finally, by combining distance education and TQM principles in the social work educational process, a

number of improvements could be made in education, training, delivery, and the evaluation of service delivery systems. Outcome measures of the effectiveness of technology-enhanced education could be performed to review and employ Deming's approach to continuous process improvement. This type of ongoing review is consistent with the CSWE accreditation process for schools of social work (CSWE Handbook of Accreditation Standards and Procedures, 1991).

Some writers have advocated the restructuring of all of American education (Groff & Cope, 1988). They note that professional educators must design many new information age ^{new} paradigms in order to keep pace with the advanced technical society which is developing. Social work education will be particularly affected by the fact that the changing demographic trends will have an impact on services as the client groups change. A recent example concerns the ramifications of the AIDS epidemic over the next decade.

As a caution, technology-enhanced education does not imply that high quality classroom or practicum teaching by expert instructors will be replaced. In fact through interactive media exemplary teaching can be presented to larger audiences or videotaped and used

an infinite number of times. Archival materials can be kept of live presentations by the greatest leaders of the profession. At the academic level, replication of assignments by school and social work agencies could be avoided resulting in more cost-effective education.

Information from the literature search indicated that geographic barriers can be overcome (Verduin, 1991). Major financial savings can result when time, travel and lodging expense are reduced by providing education in the workplace through distance education.

In the case of the education of field instructors, courses on supervision can be presented at agencies through distance education rather than having the staff travel to the university for all classes. Reasonable fees could be charged by the schools of social work for tuition, audio and videotapes, plus printed materials to accompany the course requirements.

Moving in the other direction, exchanges could be initiated wherein live staff presentations in agencies could be transmitted to schools for discussion in classes. Such presentations could also be recorded on videotape for consideration at a later date.

There are many indications in the literature that the increasing use of technology is both a desirable

and necessary goal for the profession of social work. Raymond (1988) comments that social work education and training has started to use interactive closed circuit television for offering continuing education to social workers in rural areas.

The place of educational technology in regard to practicum education could be based on a model which is being used in the Fairfax County Public School System. Garcia (1992) discusses what are termed "electronic field trips." In Virginia, elementary school classes have been using interactive television on a world-wide basis to learn directly from experts such as astronauts, politicians and scientists. This concept could be easily adapted to social work education when moved to a larger arena of global education of students. Information exchanges can be developed between United States social work students and students from other countries.

Garcia (1992) notes that schools in Canada, Mexico, and the Caribbean already receive educational programs at no cost via satellite dish or through their local cable stations. He states that apart from the hookup, all that schools need is a television set, a

modem, a telephone, and imaginative teachers and students in an environment which is receptive. That type of education could be transmitted anywhere in the world today.

Distance education holds a great deal of promise for education in social work. No articles were found that indicated that social work teachers should not use distance education. More often, the caveats were about initial financial costs and the overhead which would involve the development of new economic policies and procedures for institutions.

Blakely (1992) argues that careful policy decisions have to be initiated since rapid changes are already taking place in the educational delivery system. Schools need to organize to manage the changes that are coming. Faculty who become familiar with technology will be in a better position to adapt to it than those academics who do not.

Summary

A substantial literature search of more than 200 contemporary documents was conducted. There are many examples in the literature of how other professions like psychology, medicine, nursing,

business, education, and others are using distance education. Also, the literature studies corroborated that adult learners respond well to distance education.

The MARP literature survey produced documents which indicated that social work education must restructure to meet the needs of the year 2000. Distance education can be used to teach social work students in colleges and universities as well as to train social work practitioners in the workplace.

Chapter 3

METHODOLOGY AND PROCEDURES

Developing the Conceptual Framework

The conceptual framework for the developmental problem-solving methodology was based on information obtained from the literature search and through attending core and specialization seminars. It was augmented through practicum development, visiting distance education sites, interviewing distance education experts and conducting surveys.

The background for the focus on adult learners, technology, and the restructuring of social work education came from specific seminars in the Nova University Programs for Higher Education doctoral program. The seminars included "Governance and Management"; the "Emergence of Vocational, Technical, and Occupational Education in America"; and "Human Resources Development." The written assignments, literature research, and the study guides for the seminars stimulated insights that contributed to the conceptual framework. Some of the topics in the seminars included future studies, strategic planning, organizational research and development, human

resources development, total quality education, and issues related to the need for the restructuring of American education.

The greatest impetus for the MARP came from the core seminar on "Governance and Management," plus texts, and the associated learning guide (Austin, Groff, & Scigliano, 1988). A practicum written for the seminar included a strategic plan for the NAFEDN (Conklin, 1992a).

A related practicum from another seminar produced a technology manual. This was used for the pilot training program on distance education and technology at UCONN (Conklin, in press-b). A third practicum concerned the assessment of student attitudes (Conklin, 1993c). This contributed to the development of questionnaires and techniques for the measurement and analysis of attitudes.

Both the 1991 and 1992 specialization seminars at the summer institutes of the Programs for Higher Education underscored a number of the current educational trends and issues which are closely related to the evolving technology. Specific information was provided at both institutes by speakers such as Knowles

(1992) about instructing adult learners, their styles of learning, development of competencies, and the measurement of educational outcomes.

The summer institutes provided additional substance for the MARP study. Each emphasized change, restructuring of education, and the use of technology.

Three areas of focus evolved to become the conceptual foundation for the MARP study. These concerned adult learners, distance education and technology, and the need to restructure social work education. These themes were followed through the study of literature, site visits, discussions with experts, and conferences.

Literature Review

In order to complete the Governance and Management Seminar, the practicums, and two specialization seminars, extensive library research was done for detailed written and oral assignments. This also contributed directly to the development of the MARP.

The library research was completed primarily through the Nova University Information Retrieval Service and the Nova electronic library. Other searches were performed through public, state university and private corporation reference libraries.

These studies led to the initiation of the training program at UCONN, the strategic plan at UCONN, and the presentation to the NAFEDN at the national conference held by the CSWE in New York City. This also was the substance for the national workshop given on distance education at the New York conference.

The procedures also included conducting numerous electronic database searches. Some of the key words used for the searches were technology, distance education, interactive television, higher education, social work education, adult education, vocational, technical, and occupational education, technology expenses, evaluation, and outcome studies in education. From several detailed database searches, abstracts were found that led to additional searches for microfiche materials. All were used as reference sources.

Videotape Review

Additional procedures included the review and analysis of a videotape about the use of interactive television in distance education by Siegel & Jennings (1992), and the use of the NewTek (1993) video "toaster." A videotape also was the source of information about the use of total quality management by Belch & Greene (1993).

Site Visits

The site visits to institutions which use distance education became an important part of the experiential dimension of the study. In each case, technologists demonstrated the use of types of electronic equipment for the transmission of audio, video, and text. Similarly, attendance at national and regional conferences offered the opportunity to take specific training in the use of various forms of distance education transmission programs.

Another part of the developmental progression of the MARP study came from visiting sites which use various forms of media transmission and distance education for training. The sites were at seven universities, four television stations and two businesses which use distance education.

The universities were Southern Connecticut State University, Central Connecticut State University, University of Connecticut at Storrs, UCONN, University of Maine at Augusta, University of Hartford, and State University of New York at Oswego. Discussions were held with media experts at each site.

On-site visits were made to television stations which use the media for educational purposes. These

included the Connecticut Public Television station in Hartford, the West Hartford cable access station, COMCAST, the cable access station in Middletown, Connecticut, and WTNH in New Haven. Experts were interviewed concerning the use of television as an educational medium. Questions were posed regarding the potential application of distance education technology to social work education.

Several other discussions were held with a media expert (W. Mason, personal communications, October 16, 1992, December 3, 1992, January 14, 1993) from the private business sector. These discussions were conducted at the Aetna Training Institute in Hartford. The Institute transmits and receives interactive television by a satellite link. It also sponsors a variety of training programs on human resources development topics.

Discussions were held with social work faculty members from the schools that are using distance education for bachelor of social work courses or degrees. The schools of social work are in Alaska (G. Berman, personal communication, February 26, 1993), Newfoundland (B. Rowe, personal communication, February

26, 1993), North Dakota (T. Heitcamp, personal communication, February 26, 1993), and Colorado (B. Sheafor, personal communication, February 26, 1993). Each discussant provided additional information about their uses of distance education.

Pratt and Whitney, a manufacturing site was visited to see the "Eagle Vision II" interactive television facility in East Hartford. This was arranged through the auspices of a military liaison officer assigned to the defense plant (R. Gracia, personal communication, May 15, 1992). The organization has a fully interactive two-way satellite program which is used internationally for business conferences and training.

National and Regional Conference Attendance

As part of the procedures, two distance education conferences were attended. One was at the national level, and one was a regional training conference. The description of the conferences follows.

The national conference on "Global Trends in Higher Education: 6th Annual Technology Conference" was attended at the University of Maine in Augusta. At the conference, training was given in the use of distance

education in higher education. This provided further experience in learning the special techniques involved in distance education.

The regional training conference on distance education was held at the Hartford Graduate Center. This graduate school is part of a new organization known as the Connecticut Distance Learning Consortium. Presentations were made at the conference regarding the use of distance education for the re-training of local area employees. Demonstrations were given of the latest technology including compressed video (personal communication, M. Danchak, January 20, 1993).

The aforementioned series of interconnected activities set the stage for the development of the conceptual framework used in the MARP. The ultimate goal of the MARP was to develop strategic plans for the implementation of distance education at UCONN and the NAFEDN. To accomplish that goal, the conceptual framework was developed which included four components in this problem-solving methodology. They included (a) the introduction of distance education to graduate students at UCONN, (b) the creation of a strategic plan for the introduction of distance education at UCONN, (c) a survey regarding the use and the anticipated use

of distance education at graduate schools of social work in North America, and (d) the creation of a strategic plan for the NAFEDN.

Pilot Training at UCONN

As a direct result of the procedures conducted, a pilot training program was started concerning distance education at UCONN. The introductory program was used to raise the awareness of graduate students about the potential uses of distance education and technology in social work education and practice.

The rationale for this project was that within a few years, the students who are currently in school will be using much more technology in the agencies in which they work than their predecessors have. Even though UCONN has not begun to use distance education, it was reasoned that the technological progress being made by other professional schools was too important to ignore. It was assumed that due to budgetary constraints, the start of distance education at UCONN would be several years in the future.

One procedure included the creation of a training program on distance education, technology, and library research. This was done in collaboration with a librarian from the Trecker Library in West Hartford

(personal communications, F. DeFranco, January 5, 12, 24, 1993). The training program was presented in three social work classes at UCONN. Students received detailed information from four separate sources.

The first source was a presentation made to the three classes by a UCONN faculty member. The material presented to the students covered the increasing use of technology in professional practice. It also included predictions about the future uses of distance education and technology in social work.

The second source of information was a technology manual which was distributed to the students (Conklin, 1992, in-press-b). This contained detailed information about doing bibliographic research utilizing technology, and the potential uses of distance education in social work.

Classroom presentations were the next source of information. These were made by the librarian and the UCONN professor. They are familiar with distance education, technology, compact disc, read-only memory (CD-ROM) searches, and off-campus library searches which can be made throughout the country. In concert with the presentation of some of the findings from the literature analysis, site visits, and conferences

related to the MARP study, the librarian was asked to comment on the development of the NREN and the NSFNET. These were attributed directly to Vice President Gore's recent initiative regarding information superhighways.

The fourth source of information in the training program was a 15-minute videotape on distance education produced for the pilot program by the UCONN professor. The process for the creation of the tape was as follows. A team was formed of several social workers who were familiar with videotape production. Studio footage of interviews was shot at a local public access television station in West Hartford, CT. Additional footage was shot by the UCONN professor and a cameraman at the Southern Connecticut State University (SCSU) campus and the Hartford area. Editing was done by the producer, a UCONN graduate, T. Davies at a local community college.

The final product was narrated by the UCONN professor. It included interviews with the director, E. Siegel, and a professor, J. Jennings, from the Southern Connecticut State University School of Social Work. Portions of the tape were dubbed in from a distance education tape produced at SCSU. The tape also included a discussion of distance education by a

UConn professor and alumna, M. Libassi, who produced a videotape on the use of pharmacology in the treatment of chronically mentally ill patients. A third portion of the tape was done by R. Gould, a social worker who is a graduate of UConn. He has produced video programs in conjunction with Connecticut Public Television on various social issues such as dysfunctional families, runaway children and the effects of substance abuse on family members.

Overall, the tape demonstrated several practical applications of distance education at the local, national, and international levels. Later, the tape was used for both local and national demonstrations.

The UConn Evaluation of Pilot Training

In order to determine whether any measurable changes had taken place as a result of the pilot training program, the next procedure involved the development of a questionnaire administered to the graduate students before and after the pilot distance education training program. In the questionnaire, six areas of inquiry were raised (see Appendix A).

The first question concerned the students' knowledge of distance education. The second concerned how familiar they were with telecommunications and the

satellite transmission of live conferences, seminars, and distance education in the classroom. The third question asked whether they had become familiar with the use of technology for library searches. The fourth major question asked if they were familiar with computerized off-campus library searches.

The fifth question included an inquiry about the types of technology that are currently being used in the practicum agencies. The sixth question raised the question about the general categories of social agencies that the students were placed in for their practicum experience.

The procedures included the analysis of the student data which was obtained from both the pre-test and post-test questionnaires. The analysis of the data by descriptive statistical methods led directly to the formulation of a plan for the implementation of distance education at UCONN.

The UCONN Plan for Distance Education

Because UCONN is not currently using distance education, a five-year strategic planning document was created for faculty discussion. The strategic plan begins with a review of the findings from the NAFEDN survey. Preliminary statements were given which

indicate that there are growing opportunities for the improvement of social work teaching at UCONN through the use of additional technological supports and distance education. Additional information was provided concerning the findings of the student pilot training program and the questionnaire findings. Also, several references were made to the alumni of UCONN who are presently engaged in the production of both video and television programs.

The plan contains a "vision of the future" section which has a variety of definitions and a description of the potential use of distance education as an enhancement to graduate social work education. This type of plan leads directly to the description of optimistic, pessimistic and realistic scenarios at UCONN. The development of the plan was related directly to the universities and businesses which were visited. The three scenarios provided alternative potential outcomes.

A seven-step action plan was proposed which would facilitate the initiation of distance education at UCONN. This plan included a step-by-step process which would take place over the next five years. The plan

was written to assist administrators, faculty committees, and teachers in the development of curriculum, education, instruction, and evaluation.

After the plan was created, it was discussed with the chair of the educational policy committee at UCONN for validation (personal communication, E. Pinner, February 17, 1993). The chair reviewed the draft plan, and made specific recommendations which were made prior to the introduction of the strategic plan to UCONN.

The report was revised (see Appendix B). In the final form, it suggests some potential improvements that can be implemented toward upgrading the educational process and overcoming geographic limitations by initiating distance education at UCONN.

Additional materials contained in the appendixes of the MARP were written to provide substantive information for the UCONN plan. These can also be used in concert with the NAFEDN plan. This includes information regarding the development of curriculum materials (see Appendix C). A specific section concerns the estimates of costs for distance education. In this appendix, costs to UCONN were estimated (see Appendix D). In the final appendix, evaluation strategies are proposed which can be used at both the

local and the national levels. These include, but are not limited to, formative and summative evaluations, and the Stufflebeam (1971) model of context-input-process-product (see Appendix E).

Developing the NAFEDN Plan for Distance Education

Based upon the experience at UCONN, a similar approach was designed to determine what use of distance education and technology was being made at the national level. Once again, the extensive literature search, training experiences, site visits, and conversations with experts contributed to the development of the survey instrument used for data collection.

An initial discussion was held with the chair of the NAFEDN regarding the potential use of distance education in social work education (D. Schneck, personal communication, August 12, 1992). Following that discussion, the chair provided additional written suggestions about the specific focus of the survey questions (see Appendix F).

Questionnaire Development

A questionnaire was developed to survey graduate schools of social work in Canada and the United States. The questionnaire had three distinct areas of inquiry. The first was to determine the extent to which the

social work schools were using distance education. Because schools of social work tend to be a part of a university, the second area was to determine what use was made of distance education by the host university. The third area concerned how technology was used by the social agencies that are practicum sites for schools of social work.

The questionnaire design was discussed with a research professor at the University of Connecticut for internal validation (A. Alissi, personal communication, October 12, 1992). It was also discussed with a technology expert from a local public cable station (T. Davies, personal communication, November 17, 1992). The questionnaire was sent to the national field education expert (D. Schneck, personal communication, December 5, 1992) for external validation. Both verbal and written suggestions were provided. The revisions were incorporated into the final questionnaire.

A letter of support for the questionnaire was provided by the chair of NAFEDN (see Appendix G). A letter of transmittal was written (see Appendix H). Both were sent with the revised questionnaire to 13 directors of field education in Canada and 111 in the United States who are members of the NAFEDN (see

Appendix F). Two weeks later, a follow-up letter and another questionnaire were sent to those individuals who had not responded.

The results were tabulated and analyzed. Based on the procedures described earlier and the findings from the data analysis, a plan was written. The plan was presented to the NAFEDN Steering Committee at the APM in February, 1993, in New York City. Specific recommendations were made by the members of the Committee after the report was presented.

The Strategic Plan for the NAFEDN

Conceptually, the development of the plan was founded on Groff's (1989) future-based planning approach to visioning and creating alternative scenarios. In this format, three alternative plans can be developed to provide for a variety of contingencies. Predictors are based upon optimistic, pessimistic and realistic options. Using futurism, shifting societal patterns and changing demographics can be flexibly handled during the time of the plan.

The initial draft of the plan was sent to the chairman of the NAFEDN, and five field education experts for validation. Written suggestions were

received from the chairman. Later, revisions were made to the draft plan which was presented to the Steering Committee (see Appendix I).

The plan started with a review of the organizational history of the NAFEDN. It also contained an analysis of the strengths and weaknesses of the organization plus a listing of the opportunities and threats to the NAFEDN. Then, optimistic, pessimistic, and realistic scenarios were presented.

The plan also included curriculum materials and teaching strategies (see Appendix J). Eight "curriculum ingredients" were provided. These included topics about the incorporation of the latest scholarship concerning technology and distance education, the provision of a wide range of knowledge, use of multiple sources of information and the use of local experts. Other topics considered variety in teaching styles plus the evaluation of competency and learning styles in teaching about distance education.

A fiscal analysis of average costs for distance education was presented (see Appendix D). Several methods of estimating costs were given. These included estimating techniques for the costs of developing training materials, the costs and profits from starting

distance education at Oklahoma State University, and an estimate from Global Technologies Enterprises (GTE) for equipment expenses.

The final portion of the planning materials included an evaluation strategy which was developed to test the effectiveness of distance education (see Appendix J). The strategy was designed to be used at any number of classroom, school or administrative and organizational levels.

National Conference Presentation

A corollary procedure to the strategic plan was a national workshop presentation made on distance education for social work. The participants were directors of field education who attended the APM. The presentation included showing the 15-minute videotape produced at UCONN for the pilot training program. Preliminary findings from the NAFEDN questionnaire were discussed. Appendixes from the MARP were used for informational purposes and as hand-outs.

Chapter 4

PRESENTATION OF RESULTS

The Conceptual Framework

The major foci of the MARP were to develop strategic plans for introducing distance education at UCONN and the NAFEDN. The two plans that were written resulted directly from the methodology and procedures which were described. The overall purposes of the plans were to provide a strategy for the improvement of social work education and ultimately social work services. Distance education is being used by other professions to enhance the teaching and learning process. Social work education can also use this method to restructure the delivery of social work education in North America.

Literature Review

The literature review formed the basic foundation related to distance education, technology, adult education, curriculum development, planning and related topics. As a result of the literature review, plans were made to obtain additional information through site visits, conversations with experts and attendance at regional and national conferences. All of the information contributed to the design.

Videotape Review

The review of videotapes on topics related to distance education and video technology led to the production of a 15 minute training tape that describes various uses of distance education for social work education. This tape was shown both at UCONN and a national conference presentation.

Site Visits

Additional detailed information was obtained through the direct observation of distance education programs. Media experts were consulted at all of the sites. The observations about the use of technology and the discussions with media experts at universities, television stations and business sites proved to be quite instructive. These experiences illustrated many of the concepts learned during the development of the conceptual framework.

Detailed questions were asked about the uses of technology and distance education. Specific questions about costs and start-up expenses were raised. Much of this information was included in both the UCONN and NAFEDN plans. Information received about teaching strategies, costs, and evaluation was incorporated into several appendixes. Further, the analysis of the data,

the site visits and literature review resulted in valuable information used in discussing the strategic plans for UCONN and the NAFEDN.

Specific discussions were held with social work educators who are doing distance education. It was learned that the schools in Alaska and Newfoundland are teaching courses by distance education at the Bachelor of Social Work level. Only two schools of social work at North Dakota and Colorado have established degree-awarding courses of study at the Bachelor of Social Work level using distance education. No information was found to indicate that any schools of social work are granting the Master of Social Work degree by distance education. Some schools have begun to teach a few courses. Most have not begun to use distance education with social agencies yet.

National and Regional Conference Attendance

The literature review information was augmented by attendance at two distance education conferences. The findings presented at the conferences contributed to the development of a new perspective on distance education. Seeing each step in the distance education process was instructive. Accompanying lectures by leaders in distance education and conversations with

colleagues resulted in the development of detailed information about the possibilities for implementation in professional education.

Pilot Training at UCONN

A distance education pilot training program was initiated at UCONN based upon the literature search, site visits, conversations with experts, and attendance at national, and regional distance education conferences. The program included a presentation by a UCONN faculty member, distribution of a technology manual which included information on distance education, a presentation on technology, distance education and library science by a UCONN librarian, and a 15 minute videotape on distance education.

The UCONN Evaluation of Pilot Training

Tests were administered before and after the pilot training program to determine whether any measurable changes had taken place in the students' knowledge about technology, distance education, and technology based library research. The pre-test instrument was administered to 62 students at UCONN. The post-test was taken by 57 students. The response rate was 91.9%.

The results of the first four survey questions about the pilot training program are as follows: No

students stated that they were very familiar with distance education before the training, while 80% stated that they were familiar with it after the training. Only 7% noted that they were unfamiliar with it in the post-test findings.

In the second question, no students answered they were very familiar with telecommunications and the satellite transmission of live conferences and distance education before the training program. After the pilot training program, 12% of the respondents were very familiar with telecommunication, 69% indicated that they were familiar, and only 17% answered that they were unfamiliar with telecommunications and various forms of satellite transmission after the pilot program.

The third question concerned the use of compact disc, read-only memory (CD-ROM) technology for library searches. Earlier, 55% of the students who were surveyed were very familiar with CD-ROM searches. Following the pilot training program, 59% noted that they were very familiar with this technology for library research. Before the training, 35% stated that they were familiar with CD-ROM searches and after the training, about the same number, 37%, were familiar. In the group of 17% who stated that they were

unfamiliar with CD-ROM searches prior to the training, only 4% of the respondents noted that they were unfamiliar with bibliographic searches done by the CD-ROM technology following the pilot training program given at UCONN.

The fourth question concerned another use of technology in which off-campus library searches can be conducted to determine the location of a variety of sources of books, reports, and literature. The results from this question were that in a pre-test given prior to the pilot training program, fully 95% of the respondents noted that they were unfamiliar with off-campus library searches. This number changed to only 21% of the respondents after the pilot training program. Overall, 14% of the respondents noted that they were very familiar with off-campus searches. Of the remainder, 66% of the respondents were familiar with searches. The findings from the results of the pre-test and post-test are listed in tabular format (see Table 1).

In the second set of questions, #5 was designed to determine what technology is used in social agencies. Seven types of technology were listed. In a range, the highest score was 41 regarding the use of videotapes.

Thirty-eight answered that their agencies use computers while 30 noted their agencies used audiotapes. five said their social agencies used modems, 4 said that CD-ROM searches are done at the agency, and 4 said that no technology was used.

Table 1

Results from Training About Distance Education,
Telecommunication, and Library Research

Question	Unfamiliar Pre / Post	Familiar Pre / Post	Very Familiar Pre / Post
1. Do you know what "distance education" is?	76% / 7%	24% / 80%	0% / 12%
2. How familiar are you with telecommunications and the satellite transmission of live conferences, seminars, distance education in classrooms?	59% / 17%	41% / 69%	0% / 12%
3. Have you become familiar with the use of technology (CD-ROM) for library searches?	17% / 4%	35% / 37%	55% / 59%
4. Are you familiar with Off Campus Library Searches?	95% / 21%	3% / 66%	2% / 14%

In question #6 which asked what types of social agencies trained students, 26 were in family agencies, 16 were in hospitals, 10 were in "other agencies," 2

were in child guidance clinics, and 2 had no placement. One student did not answer. (see Table 2).

Table 2

Results from Questions about the Use of Technology by
Social Work Practicum Agencies and the Type of Agency

Question	Number
5. What types of technology does your field agency use?	
Audiotapes	30
Videotapes	41
Computers	38
Modems for computer	5
CD-ROM Searches	5
Satellite receiving facilities	1
Satellite sending facilities	1
No technology	4
Total of duplicated numbers	125
6. My agency is a hospital, family agency, school, or "no placement."	
Hospital	16
Family agency	26
Child Guidance Clinic	2
Other agency	10
No placement	2
Total respondents	56

The UCONN Plan for Distance Education

A strategic plan was written for the introduction of distance education to UCONN (see Appendix B) based

on the data collected from the literature search, site visits, conferences and the questionnaire results. Distance education could help UCONN restructure the educational process and overcome geographic, physical, and temporal limitations so that more students would be reached throughout the region.

Following a discussion of the plan with the chair of the UCONN Educational Policy Committee, it was sent to members of the committee. It will be studied at length and ultimately presented to the faculty and administration for discussion.

Included in the plan was a summary of literature on distance education. The plan noted that distance education can be used to enhance the educational process both at UCONN and in the field agencies used for practicum training.

Optimistic, pessimistic, and realistic scenarios were offered about technology and the use of distance education at UCONN. Optimistically, since other universities in the area have begun to use distance education, UCONN can, too. The technology exists for UCONN to teach through the use of distance education.

The pessimistic scenario noted that in a recessionary economy, it would be possible to find a

rationale for not investing in technology. Change could be thwarted by the faculty or the administration by not taking action on the plan.

The realistic scenario noted that whether UCONN took action or not, it would be drawn into distance education ultimately by virtue of the fact that other schools are starting to use the method of teaching. It would be wise to use a great deal of visionary planning for the future by joining with other social work schools of higher education.

A seven step action plan was suggested. This included preliminary discussion, establishment of a technology committee, discussions with the dean, and conversations with other higher education schools. Fifth, UCONN should begin to work closely with Connecticut Public Television for their expertise in programming. Sixth, a distance education curriculum should be developed so that courses could be taught in the academic year 1995-96. Seventh, both formative and summative evaluations should be developed in the future to determine the effectiveness of distance education at UCONN. Following the summative evaluation, appropriate changes should be made in the strategic plan to reflect

the various economic, demographic and political changes which are expected to occur in both the university and the economy.

Developing the NAFEDN Plan for Distance Education

A strategic plan was written for introducing distance education to the NAFEDN. The plan was based on the literature search, site visits, conferences, and the results from a survey instrument. The process followed for developing the NAFEDN plan was similar to that used for developing the UCONN strategic plan.

Questionnaire Development

The major focus of the NAFEDN questionnaire was to determine what use is being made of distance education at graduate schools of social work, universities, and at the social work agencies which provide practicum training. Also, it was designed to elicit information about what other types of technology were being used. It was thought that this information might make it possible to use the technology like telephones, fax machines, computers and modems as technical supports for distance education as it is further developed in the future.

The questionnaire was also designed to elicit information related to a planning process. If schools

of social work collaborated with media departments, this could facilitate distance education.

The NAFEDN questionnaire was sent to all 124 graduate directors of field education in Canada and the United States. (see Appendix G) Two weeks later, a second mailing was sent to those who had not responded to insure a high rate of return. Overall, 96 questionnaires were returned, a response rate of 75%.

Results of the NAFEDN Questionnaire

Schools of Social Work

The first questions concerned technology. The first question asked whether audiotapes and videotapes were used. The major response in both categories was "sometimes." Interestingly, 52% of the respondents said they use fax machines frequently and 31% indicated that they use them often. The answers to a question about the use of electronic mail were distributed equally. Also, computers are used frequently in the social agencies which train the students.

Several questions were posed about technology use in Canadian and United States schools of social work. These were designed to elicit data about how much schools use modern technology to augment teaching and administrative functions. The results are presented in

the form of percentages and reported in tabular format (see Table 3).

Table 3

Technology Used at Schools of Social Work

Question	Never	Some-Times	Often	Frequently	Don't Know
1. We use audiotapes for classroom teaching	8%	57%	13%	14%	03%
2. We make audiotapes for classroom teaching	33%	47%	6%	12%	10%
3. We use videotapes for classroom teaching	0	26%	42%	31%	0
4. We make videotapes for classroom teaching	9%	59%	14%	13%	3%
5. We use videotapes for agency teaching	10%	71%	9%	01%	8%
6. We use a fax machine	1%	10%	31%	52%	3%
7. We use electronic mail	25%	22%	21%	24%	5%
8. We use voice mail	33%	4%	16%	38%	7%
9. We use computers	0	3%	18%	76%	1%
10. We use modems	12%	29%	24%	25%	8%
11. We use CD-ROM technology for literature searches	12%	13%	15%	41%	17%
12. We use interactive compact disc (CD-I) programs	36%	8%	8%	6%	40%

Technology Use by Universities

The second set of questions concerned the use of technology by the larger universities of which most Canadian and United States schools were a part. Of the respondents, 29% answered that some courses are taught by interactive television, 29% stated the university did not teach courses by interactive television, and 41% of the respondents "didn't know."

Fully 94% of the universities have educational media departments and recording studios. In questions about interactive television, the most common type is video transmission and two-way audio by telephone. The respondents noted that 28% of the universities had this facility, 30% did not, and 40% did not know.

In reference to planning, 71% of the respondents said their schools had worked with the educational media departments; 58% said the school of social work worked a great deal with the media department. The overall point was to see if whether social work schools could develop the potential to produce distance education via collaboration with other departments in their respective universities.

The following responses have been converted into percentages to aid in the review of the data. They are presented in tabular format (see Table 4).

Table 4

Technology Used at Universities

Question	Yes	No	Don't Know
1. The university has a media department	94%	5%	0
2. The university has recording studios in which videotapes can be produced	84%	9%	5%
3. The university has a satellite link and the capacity to receive and transmit meetings, classes, conferences "live"	61%	16%	22%
4. The university uses these facilities to transmit courses to remote sites	39%	26%	33%
5. The university teaches by interactive television	29%	29%	41%
6. The university uses interactive television courses with a telephone connection for questions	28%	30%	40%
7. The university uses interactive television courses with two-way interactive television	22%	30%	45%
8. The school of social work has never worked with the media department regarding presentations	15%	71%	12%
9. The school of social work has begun to work with the media department regarding presentations	58%	31%	10%
10. The school of social work has worked a great deal with the media department	39%	51%	9%

Field Agencies

In the third set of questions on the potential distance education resources in the field agencies, only 30 people responded to the question. Of that number 23 individuals answered that the agencies did not have the facilities for distance education. Also, it was noted by 63% of the respondents that agencies "sometimes" used audio tapes for field teaching while two-thirds said that video tapes were used "sometimes" used for teaching in field education.

Agencies, like schools, have made use of some types of technology that could later be incorporated into a distance education format. About two-thirds of the respondents answered that fax machines are used frequently or often by social work agencies. Also, 43% of the agencies were reported to be using computers "frequently," 43% answered "often" while 22% of the respondents said that their agencies "sometimes" used them. More than half of the answers given indicated that the respondents did not know about the use of modems in the agencies that were associated with the schools of social work.

Of the 62 people who answered the final question, 58 did not know if the social agencies were able to

transmit distance education programs. More research needs to be done on this question.

No major indications were given by the respondents that many schools or social agencies use distance education. Somewhat more than 20% of the universities reported they have facilities for distance education.

Some schools can develop distance education through the media facilities of the main university. Programs could be sent to those practicum sites which have distance education receiving capability such as hospitals, medical schools and two and four year colleges in the geographic region.

Table 5 contains the results from questions raised about the use of technology at field practicum sites. According to the respondents, by this time, most agencies use fax machines. "Some" to "many" use electronic mail, voice mail, and computers. Forty-five respondents did not know whether the agencies used modems or not. Many respondents also indicated that they did not know whether the agencies used CD-ROM technology or interactive compact disc programs. They also did not know if the agencies had satellite dishes with which to send or receive programs (see Table 5).

Table 5

Technology Used at Field Agencies

Questions	Never	Some-Times	Often	Frequently	Don't Know
1. They use audio tapes for field teaching	7%	63%	11%	10%	7%
2. They make audio tapes for field teaching	19%	57%	3%	6%	13%
3. They use video tapes for field teaching	3%	66%	22%	4%	2%
4. They make video tapes for field teaching	14%	62%	8%	2%	12%
5. They use video tapes for field teaching	51%	40%	1%	2%	4%
6. They use a fax machine	0	27%	33%	32%	7%
7. They use electronic mail	7%	36%	10%	9%	35%
8. They use voice mail	5%	27%	25%	20%	19%
9. They use computers	2%	22%	27%	43%	4%
10. They use modems	4%	20%	10%	9%	54%
11. They use CD-ROM technology for literature searches	7%	10%	3%	0	78%
12. They use "interactive compact disc" (CD-I) programs	10%	3%	1%	0	84%
13. They transmit programs by satellite	23%	11%	0	1%	63%

The fourth set of questions concerned demographic and sponsorship data. Five questions concerned regional characteristics and the type of university to which the school of social work belonged.

Ten Canadian schools returned the questionnaire. Three were in the Western Region, 3 were Central, 2 in the Great Lakes Region, and 1 each from Ontario, and the Maritime area. From 74 United States schools, 18 responses were from the Northeast, 10 from the South, 9 from the West, 8 from the Southwest, 6 from the Southeast, 4 were from the Mid-Atlantic area and 1 each from the Northwest and Rocky Mountain regions.

Thirty-seven respondents said their school was from a "major metropolitan area plus regional area within state." Also, 25 responses came from major metropolitan area schools. Nineteen noted they were from a "statewide" area, 6 were regional schools, while 6 stated that they were national schools and 3 answered that they were international schools. Sixty-one respondents reported that their school of social work was part of a public university, and 17 were from a private university. Finally, four individuals were from a private college, 2 were from a public college, and 1 was from a sectarian school (see Table 6).

Table 6

Demographic, Regional, and Sponsorship Data

Question	Number
1. The School of Social Work is located in	
Canada 10	U. S. 74
2. In Canadian schools, indicate the region	
Western	3
Ontario	1
Great Lakes	2
Central	3
Maritime	1
3. In U. S. schools, indicate the region	
Northeast	18
South	10
Southeast	6
Mid-Atlantic	4
West	9
Northwest	1
Southwest	8
Rocky Mountain	1
4. Primary region that the school serves is a	
Major metropolitan area	25
Major metropolitan area	
plus regional area	
within state	37
Statewide	19
Regional	6
National	6
International	3
5. The school is part of a	
Public University	61
Private University	17
Public College	2
Private College	4
Sectarian School	1

The Strategic Plan for the NAFEDN

A strategic plan for the implementation of distance education in social work for the NAFEDN was written (see Appendix J), based upon the literature search, conversations with experts, site visits, and the results from the analysis of the NAFEDN questionnaire. The plan was presented at the annual meeting of the Steering Committee at the Annual Program Meeting of the CSWE in New York City in February, 1993.

Overall, the plan was designed to advocate for the use of distance education in social work, particularly in field education. The initial part of the plan summarized some of the historical events which led to the establishment of the NAFEDN. It also reported on an earlier strategic plan and a description of the NAFEDN questionnaire. A description of the NAFEDN questionnaire process was given. Some specific findings were also given. These indicated that while most schools of social work have not started to use distance education, the basic components exist on many campuses in the educational media departments.

Five specific recommendations were offered in the plan for the use of technology, establishment of a technology committee, introduction of distance

education as a support to practicum education, development of new sources of funding, and the use of funding to finance travel during the year for members of the NAFEDN Steering Committee. As part of the plan, curriculum materials were developed (see Appendix H). A fiscal analysis of costs was developed (see Appendix I). An evaluation strategy was distributed (see Appendix J).

Optimistically, over the next five years, programs could be initiated in social work to start using distance education as other related helping professions have done. On a pessimistic note, because of changes in leadership, lack of funding or lack of technical knowledge, the NAFEDN might do little to promote distance education.

Realistically, some actions could be taken which might gradually gain momentum over the next several years. It was suggested that the time to begin using distance education in social work had arrived.

Eight specific goals were proposed. These included (a) having the NAFEDN support, in principle, the use of distance education; (b) developing a technology committee; (c) charging the committee with the responsibility to work closely with other CSWE

technology committees when they are established later; (d) having the committee study the findings from the NAFEDN questionnaire; (e) beginning to consider the production of videotapes about social work education; (f) developing a report for the next meeting of the NAFEDN; (g) creating assessment measures by using formative and summative evaluation; and (h) providing information about this process widely throughout the CSWE network.

As a result of the presentation, a NAFEDN "Distance Education and Technology Committee" was created. This will begin to serve as a clearinghouse for the collection of materials from schools of social work on distance education. It will also serve in an advocacy capacity for distance education.

National Conference Presentation

As a direct result of the workshop presentation made on distance education at the CSWE, a number of directors of field education in addition to the members of the Steering Committee were informed. They viewed the 15 minute videotape which was made at UCONN. Also, some additional information was provided about the NAFEDN questionnaire and the proposed NAFEDN plan for distance education.

Chapter 5

DISCUSSION, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Discussion

Higher education is in transition from a post-industrial era to an advanced technical era. As part of the higher education system, social work education must restructure rapidly to accommodate massive societal changes and technological innovations.

This discussion consists of five sections: the development of a conceptual framework, the UCONN pilot training program, the UCONN strategic plan for distance education, the development of a NAFEDN strategic plan, and the distance education plan for NAFEDN.

The Conceptual Framework

The conceptual framework focused on three areas: adult learning, technology and distance education, and the need to restructure social work education.

Distance education and technology can be used to enhance social work education for adult learners. It can be used to restructure social work education.

Distance education can be used to minimize geographic, physical, and temporal restrictions limiting social work education in both Canada and the United States.

Literature Review

Through the review of literature, three major points were identified: (a) distance education is already being used at many levels from elementary education through graduate school; (b) distance education is being used for professional education in other fields such as medicine, nursing, psychology, education, and engineering; and (c) it is not being used to a significant extent in social work graduate education at the present time.

Videotape Review, Site Visits,

Conversations with Experts,

and Conference Attendance

Reviewing the materials from additional sources increased the breadth and depth of conceptual understanding about the potential applications of distance education to social work education. Through these experiences, a clearer understanding of distance education evolved. This was used in preparing the strategic plans, curriculum, and evaluation tools for social work education.

The additional information supported a preliminary observation that distance education can be used for social work teaching at the local, national, and,

international levels. Second, distance education can be used for both classroom and practicum education. Third, continuing education and a number of other training functions in social work can also be enhanced through the use of distance education.

Pilot Training at UCONN

The pilot training program at UCONN had never been given before the Winter, 1993 presentation. This was the first time that librarians had been involved in direct classroom instruction at UCONN.

The UCONN Evaluation of Pilot Training

The results of the questionnaire indicated that the pilot training program was a success. Based on these results, it was decided to continue the training program for the 1993-1994 academic year. The training program will be enriched in three ways. First, UCONN alumni currently involved in public and cable television programming will be invited to the pilot program as guest lecturers. Second, they will provide information to social work students each year about the latest innovations in distance education. Third, the training program can be replicated at other schools of social work through the use of videotapes.

The UCONN Plan for Distance Education

The UCONN strategic plan proposed to faculty and administration that educational restructuring and innovation should be initiated through distance education. This could have several effects. First, distance education could result in the restructuring of course material presented by the faculty. Also, since most of the students are adult learners, more self-directed study could be done through the use of videotapes of presentations made via distance education. In this sense, the delivery system would be changed by distance education.

Second, classroom teaching could be presented over a wider geographic area to larger audiences. Third, distance education would also make it possible for UCONN to exchange courses with other professional schools and social agencies in the area.

Development of the NAFEDN Plan

The national plan evolved from the materials developed for the conceptual framework, visits to sites, conferences, and the conversations with experts. This was enhanced by the experience gained from developing a strategic plan at UCONN.

Results of the NAFEDN Questionnaire

An innovative approach was developed which was used to encourage schools of social work to make greater use of distance education in both Canada and the United States. The major rationale for this concerned the factor of time. Since few schools were using distance education, advocacy for the use of distance education was provided at the CSWE conference to several national groups including the NAFEDN.

The Strategic Plan for the NAFEDN

The strategic plan was discussed with a national social work committee which has considerable influence on practicum education in Canada and the United States. The first salient point was that distance education could enhance graduate teaching through providing a methodology for schools and field agencies to work more closely together in spite of geographic distances.

Second, although start-up costs were significant, media departments within universities have the capacity to do distance education. As larger audiences are reached, costs decrease and profits increase.

Third, other humanistic professions already use distance education. The literature described the success of this approach in other schools.

National Conference Presentation

The participants in the national workshop were field directors and educators from throughout North America. The presentation led to a discussion about the advantages of distance education, the costs, curriculum, ethical issues and outcome studies.

Conclusions

The Conceptual Framework

Three major conclusions were drawn about the conceptual framework from the literature review, social work articles, and the lack of literature available. First, the conceptual framework was the major support for the MARP study. Second, there is a burgeoning literature developing in technology reports and manuals. However, little can be found about distance education in graduate social work education. Third, other articles about distance education and social work may have been but have not yet appeared in print.

Videotape Review, Site Visits,

Conversations with Experts,

and Conferences

Three conclusions were reached from the review of videotapes, site visits, conversations with experts, and conferences. First, distance education is a

valuable educational enhancement which can be used to enrich social work education. Second, it is already being used by other professions who use practicum training. Third, distance education has no geographic, physical, or temporal boundaries.

Pilot Training and Evaluation

Four conclusions were drawn from the pilot training program and evaluation at UCONN. First, the training was effective. Second, until social work education initiates more widespread use of distance education and training, this pilot training can prepare students for future practice in the changing workplace of the information era.

Third, a pilot training program can be produced at no cost to other institutions as was done at UCONN. Presentations made by the UCONN professor and librarian were done without expense. The preparation of the technology manual was done as part of a practicum assignment for Nova. The production cost of the 15 minute videotape was absorbed by the UCONN professor.

The fourth conclusion is that this model could be replicated at schools of social work throughout the country. Also, many other topics related to distance education could be discussed.

The UCONN Plan for Distance Education

Three conclusions were drawn from the UCONN plan. First, UCONN institution could benefit from the implementation of distance education immediately. Second, distance education could be used to enhance, and modernize the way that courses are delivered. Also, through the use of videotaping, major presentations could be saved for additional teaching purposes. Videotapes could be placed on reserve in the library for students to view at home.

A third conclusion is that teaching courses by distance education would help UCONN overcome geographic, physical, and temporal limitations. Currently, students travel long distances to the campus from all of the New England states.

In summary, the optimistic, realistic, and pessimistic scenarios of the plan cast three possibilities for UCONN. Optimistically, there are important educational, economic, access, and quality issues related to the reasons why UCONN should initiate distance education at this time. Realistically, there are a number of economic constraints on the University of Connecticut and the school of social work. However, other schools in the area are beginning to use distance

education. Pessimistically, if UCONN does not begin to use distance education at the present, ultimately, it will be drawn in just by virtue of competition with other schools in attracting students.

Development of the NAFEDN Plan

Based upon the results from the NAFEDN questionnaire, three conclusions can be drawn. First, not many schools of social work in Canada or the United States reported that they use distance education. Second, the universities of which they are a part have educational media centers with which they are beginning to work. Therefore, it seems just a matter of time before distance education programs will be used by schools of social work at the national and international levels.

Third, not many social work agencies were reported to be using distance education. However, the literature search revealed that medical educators use distance education. In this case, social workers in hospitals and practicum students could also receive distance education programs from other sites.

The Strategic Plan for NAFEDN

The results from the NAFEDN strategic plan led to three specific conclusions. First, since the social

work education is lagging behind other professional educators in the use of distance education, specific actions should be taken by schools of social work throughout Canada and the United States. Second, if graduate schools of social work begin to use distance education, this will have an impact on undergraduate schools of social work, the doctoral level programs in schools of social work, continuing education programs, and ultimately the profession.

Third, all of the information obtained which was used for the creation of the strategic plan for North American schools can be used as part of the model to initiate distance education in schools of social work. The plan contains supporting documents regarding curriculum, costs, and evaluation which support distance education in schools of social work in both Canada and the United States.

National Conference Presentation

Two conclusions were drawn from the national workshop. First, social work educators were interested in the information provided on distance education. Following the presentation, requests were received nationally for copies of the presentation materials.

Some participants asked for a copy of the 15 minute training video. Others requested additional consultation on distance education.

The second conclusion was that a great deal of educational material can be introduced in a short period of time using a videotape, lecture, handouts and a discussion period. As with the students at UCONN, attitudes can be changed and knowledge imparted through the use of this type of approach.

Answers to the Research Questions

The six research questions were answered in the following manner. In answer to the first question concerning how graduate schools are using distance education, the respondents indicated that not many schools of social work or social agencies were using distance education to any great extent.

Some social work schools in rural areas are beginning to use distance education, particularly at the bachelor's level and if the program serves a large geographic area. Cost, program quality, and the potential use of technology are the primary forces contributing to this trend. Further research needs to be done on distance education, technology use and social work education.

The second question concerned planning being done by schools of social work in Canada and the United States regarding distance education. The indications from the questionnaire and conversations with experts are that quite a bit of planning has been done by the few undergraduate schools that are already using distance education in rural areas. Only recently has a group of educators begun to work at the national level to advocate the use of distance education in social work education (T. Blakely, personal communication, February 26, 1993).

The third question concerned the training approaches that can be used to teach social work practicum directors about distance education. The answer came from the presentation made to the NAFEDN directors and the workshop on distance education made at the CSWE annual meeting. In both cases, the discussion of the conceptual framework developed from the literature search and other sources of information, plus other data from the appendixes of the MARP was effective. The 15 minute videotape was instrumental in teaching practicum directors about distance education.

The fourth question about the type of plan needed to implement distance education in schools of social

work was answered by writing the NAFEDN plan. The generic plan was designed to implement distance education at any schools of social work in Canada and the United States. A technology committee was established by the NAFEDN to introduce distance education to schools of social work. Further discussion will be held at 1994 meeting in Atlanta.

The fifth and sixth research questions concerned how the effectiveness of distance education can be measured in the classroom, the practicum setting, and the institution. This can be done through the use of models taken from the Nova core seminar on Research and Evaluation plus the core seminar on Curriculum and Program Planning (see Appendix E). The models can be effective for outcome measurement at the classroom, institutional or practicum level.

Implications

Conceptual Framework

Three specific implications can be derived from the conceptual framework. First, these concern the demographic changes in the age of the student body. Today, adult students over the age of 25 are becoming the largest group of learners in this country (Levine

and Associates, 1989). Within schools of social work many more students in the 30, 40, and 50 year old age cohorts are returning for advanced degrees.

Second, schools of social work need to initiate technology-supported distance education programs which can offer degree programs to adult learners. Many of these adult learners have family obligations which can be eased by greater accessibility to education.

Geographic distance is a major factor in the access to schools in rural areas such as Alaska, Canada, and many regions areas of the United States. Conversely, complex travel problems within large metropolitan areas also can be alleviated through the use of distance education for teaching and instruction between universities.

Third, the nation is in the midst of the information age. Several authors advocate that major restructuring of education must be done as we move farther into the information age (Verduin & Clark, 1991, Groff, 1990a, Groff, 1990b, Groff, 1991). Distance education can be used in the restructuring of masters level and continuing education courses. Social workers need to upgrade skills in the application of

the latest theories and practices. Courses could be given at the job site which provide social workers with information about the "cutting-edge" practice approaches or information about research findings on community health problems such as AIDS.

UCONN

Three implications can be derived from the pilot training program and the UCONN strategic plan. First, social work education is being delivered at UCONN in approximately the same style as it was over 30 years ago. There is a need to update the usual lecture-discussion format in the classroom and to train students in the use of the most up-to-date technological supports to education that are available. This would address some issues based upon the rapidly changing social and demographic trends. Also, there is a need to train a workforce that is sophisticated in the use of technology. Distance education could help to accomplish all of those goals.

Second, another application of distance education could be for the training of practicum instructors. Rather than having to travel long distances to UCONN from throughout New England, practicum instructors

could be trained in educational supervision at their agencies or at centrally located sites that are more convenient within several states.

A third implication for distance education at UCONN is the possibility of bringing education to disabled students. Through distance education, teaching and training can be made even more accessible for those who have a variety of physical limitations and related transportation problems that are associated with geographic distance, complex urban traffic or any combinations of travel problems.

NAFEDN

Based upon the results of the NAFEDN questionnaire and strategic plan, three major implications can be listed. First, key leaders in social work field education support the use of distance education in practicum training. Members of the NAFEDN steering committee are on the CSWE Commission on Field Education. Therefore, the implication is that the use of distance education will be supported at the national level as the Commission works more closely toward the improvement of practicum education.

Second, the time has arrived when the social work educational profession must restructure and update by

using distance education to teach adult learners. In a time of greatly changing social and demographic trends, the use of distance education can enhance the teaching process and make available the latest information to students, and workers at the job site.

Distance education can be the vehicle which will permit social work education to reach across local, state, regional and national boundaries. It can also provide a number of educational opportunities for social work at the international level.

Recommendations for Implementation, Dissemination,
and the Improvement of Practice

Implementation

The recommendations for the implementation, dissemination and the improvement of practice are related to the focus on adult learners, the use of distance education, and the need to restructure the delivery of social work education. It is recommended that professional social work education comprise the following actions:

- a. Begin to modernize both teaching and training through distance education. This can be done through collaboration between the faculty and the

administration at UCONN. In this way, the school will be part of the trend toward the use of technology in educational settings.

b. Begin to implement the modernization of teaching in schools of social work through the use of distance education as soon as possible in both Canada and the United States.

c. Continue to make improvement in the use of use distance education and technology to keep social work instruction current with educational advancements as the information age accelerates. This can be done collaboratively through the NAFEDN steering committee and the Commission on Field Education of the CSWE.

Dissemination

The dissemination of these recommendations can be done through the NAFEDN, the Commission on Field Education, presentations at national conferences, scholarly publications, and similar academic avenues. It also can be done through the use of the videotape produced for the UCONN training program.

Improvement of Practice

Social work education needs to initiate the use of distance education. The illustration was given of teaching at UCONN. In a microcosm, this represents an

average type of graduate school in which not much has changed in many years. This scenario is repeated in many places throughout the country.

Currently within social work, there a split between education and practice. The National Association of Social Workers, a 135,000 member organization, has established the NASW Communications Network, Inc. This corporation advocates the use of media in the production of film, videotapes, television and radio programming for the education of the public about social work related issues.

If the professional membership organization has this network, and the professional educational organization does not, this represents a dichotomy within the same profession. The findings of the NAFEDN questionnaire were that not many schools are using distance education. Also, the social agencies are not using distance education for training.

This supports the primary contention of the MARP that social work education needs major restructuring which can be assisted through the initiation of distance education. Adult learners can be instructed more effectively through distance education as a support and enhancement to teaching.

BIBLIOGRAPHY

- Abernathy, P. E., & Serfass, R. W. (1992). One district's quality improvement story. Educational Leadership, 50, 144-147.
- Abrahamson, J. S., & Fortune, A. E. (1990). Improving field instruction: An evaluation of a seminar for new field instructors. Journal of Social Work Education, 26, 273-286.
- Anglin, G. J. (1991). Instructional technology: Past, present, and future. Englewood, CO, Libraries Unlimited.
- Austin, D. L., Groff, W. H., & Scigliano, J. A. (1988). Governance and management. Fort Lauderdale: Nova University.
- Avergakis, G. (1992). From home videos to home box office. Video Toaster Reader, 1, 39-44.
- Baker, D. R. (1991). On-line bibliometric analysis for researchers and educators. Journal of Social Work Education, 27, 41-47.
- Bates, A. W. (1988a). Experiences from the British Open University and pointers to the future. Stockholm: paper presented at the Conference Distanceundervisning: En undervisningform for 90-talet. (ERIC Document Reproduction Service No. ED 318 422)
- Bates, A. W. (1988b). The use of satellites for training in Western Europe. Berlin, Germany: Paper presented at the conference New Educational Media: New Directions in the Training of Trainers. (ERIC Document Reproduction Service No. ED 318 423)
- Bates, A. W. (1989a). The challenge of technology for European distance education. Heerlen, Netherlands: European Association of Distance Teaching (ERIC Document Reproduction Service No. ED 318 424)

- Bates, A. W. (1989b). Towards a European electronic university: Technology and course design for European-wide education courses. (ERIC Document Reproduction Service No. ED 318 427)
- Beaudoin, M. F. (1990, February). The instructor's changing role in distance education. The American Journal of Distance Education, 4, 21-29.
- Beich, E., & Greene, D. (1992). Managing the turmoil created by implementing tqm: Proceedings of the 1992 astd national conference (Videotape). New Orleans: ASTD.
- Bengston, B. (1993, January). Computers in school: The Swedish strategy. T.H.E. Journal, 19, 68-71.
- Berenfeld, B. (1993, January). Linking east-west schools via telecomputing. T.H.E. Journal, 20, 59-62.
- Berger, G. I., & Daugherty, R. D. (1988). Challenges for preparing the new work force for the year 2000. (ERIC Document Reproduction Service No. ED 310 817)
- Bernstein, M. (1992, August 10). Picture this: Filing photos on cd's makes viewing as easy as watching TV. Hartford Courant Business Weekly, 154, p. 1.
- Birchall, S. (1992). Micro revolution in higher education. Softside: Computers in Education, 6, 26-32.
- Birnbaum, B. W. (1992). Telecommunications and distance mentoring: Developing support networks to increase academic competencies and affective interactions. Paper presented at "Global Trends in Distance Education: 6th Annual Technology Conference," University of Maine, Augusta.
- Blakely, T. J. (1991). Distance education needs assessment. Unpublished manuscript, School of Social Work Off-campus Program, Western Michigan University, Grand Rapids.
- Blakely, T. J. (1992). A model for distance education delivery. Journal of Social Work Education, 28, 214-221.

- Bonstingl, J. J. (1992). The quality revolution in education. Educational Leadership, 50, 4-9.
- Bonstingl, J. J. (1992). Schools of quality: An introduction to total quality management in education. Alexandria: Association for Supervision and Curriculum Development.
- Bookman, B. (1992). Energizing your tqm program. The Quality Observer, 2, 15-19.
- Boone, M. E. (1991). Leadership and the computer. Rocklin, WI: Prima.
- Boucher, R. (1992). The challenge of transition. EDUCOM Review, 27, 30-35.
- Boyd, L., Hylton, J., & Price, S. (1978). Computers in social work practice: A review. Social Work, 23, 368-371.
- Brandt, R. (1992). On Deming and school quality: A conversation with Enid Brown. Educational Leadership, 50, 28-31.
- Brey, R. (1991). U. S. postsecondary distance learning programs in the 1990's: A decade of growth. Washington: American Association of Community and Junior Colleges.
- Bright, L. K. (1990). Videodisc development for human service professions: Potentials and risks for production by university faculty. Computers in Human Services, 7, 247-263.
- Carl, D. R. (1984). Using videoconferencing over open broadcast satellite to deliver credit courses. Ottawa: Paper presented at the Canadian Satellite Users Conference. (ERIC Document Reproduction Service No. ED 282 517)
- Carl, D. R. (1986). Teaching on duet. Toronto: Paper presented at the Conference of Canadian Association for Distance Education. (ERIC Document Reproduction Service No. ED 282 514)
- Carlson, R., & Goldman, B. (1991). 2020 visions: Long view of a changing world. Stanford: The Portable Stanford Book Series.

- Cetron, M. J. (1985). Schools of the future: How American business and education can cooperate to save our schools. New York: McGraw-Hill.
- Cetron, M. J., & Davies, O. (1989). American renaissance: Our life at the turn of the 21st century. New York: St. Martin's Press.
- Cetron, M. J., Rocha, W., & Luckins, R. (1988). Long term trends affecting the United States. The Futurist, 22, 29.
- Chang, R. Y. (1992). When tqm goes nowhere. Training and Development, 47, 22-29.
- Chapanis, A. (1976). Human factors in teleconferencing systems: Final report. Baltimore: Johns Hopkins University, Department of Psychology. (ERIC Document Reproduction Service No. ED 163 902)
- Charp, S. (1992). Editorial. The Technological Horizons in Education Journal, 19, 6.
- Christensen, K. E. (1986). Ethics of information technology. In Geiss, G. R., & Viswanathan N. (Eds.), The human edge: Information technology and helping people. New York: Haworth Press.
- Cisco, P. G. (1990). Linking classrooms of the future through interactive telecommunications network. Paper presented at the Annual Meeting of the American Vocational Association, Cincinnati.
- Cnaan, R. A. (1989). Introduction: Social work practice and information technology--an unestablished link. Computers in Human Services, 5, 1-15.
- Collins, V. A., & Murphy, P. J. (1987, March). The human-technological interface: An analysis of a satellite communication. Higher Education in Europe, 12, 55-61.
- Conklin, J. J. (1992a). Number of enrollees in social work related programs at community colleges. Unpublished manuscript. Fort Lauderdale: Nova University Programs for Higher Education.
- Conklin, J. J. (1992b). An assessment to develop strategic goals for the North American field education directors association. (ERIC Document

Reproduction Service No. ED 345 615)

- Conklin, J. J. (in press-c). The development of a technology handbook for the University of Connecticut School of Social Work. Outstanding Educational Improvement Projects, Fort Lauderdale: Nova University.
- Conklin, J. J. (in press-d). The development of an articulation plan for the University of Connecticut and practicum settings. Outstanding Educational Improvement Projects: Fort Lauderdale: Nova University Programs for Higher Education.
- Conklin, J. J. (1993). An assessment of student attitudes regarding the practicum at the University of Connecticut School of Social Work. (ERIC Document Reproduction Service No. ED 350 918)
- Conklin, J. J., & Borecki, M. C. (1987). A state university-public school partnership: The Hartford model mental health service component. Paper presented at the National Association of Social Work Conference, New Orleans.
- Coughlin, J. (1989). The BI librarian's new constituency: Adult independent learners. Computers in Human Service, 6, 159-173.
- Council on Social Work Education (1991). Annual statistical report. Alexandria: Council on Social Work Education.
- Council on Social Work Education (1992). Directory of colleges and universities with accredited social work degree programs. Alexandria: Council on Social Work Education.
- Council on Social Work Education, Commission on Accreditation (1991). Handbook of accreditation standards and procedures. Alexandria: Council on Social Work Education.
- Cournish, E. (Ed.) (1990). The 1990's and beyond. Bethesda: World Future Society.
- Dahmer, B. (1993, January). When technologies connect. Training and Development, 47, 46-55.

- David, J. L. (1991). Restructuring and technology: partners in change. Phi Delta Kappan, 2, 37-82.
- Davis, B. (1993, January/February). Looking and Learning Through Computers. EDUCOM Review, 28, 20-25.
- Deaton, R., & Clark, F. W. (1987, March). Teleconferencing and programmed instruction in rural Montana: A case example in foster care education. Human Services in the Rural Environment, 10, 14-17.
- Dinlocker, C. (1992). Our Deming users' group. Educational Leadership, 50, 32.
- Dirr, P. J. (1988). Building a program for distant learners. The Distant Learner in the Human Service Professions: A Reader, (47-53). Columbia, SC: University of South Carolina.
- Duderstadt, J. J. (1992). An information highway to the future. EDUCOM Review, 27, 36-45.
- Dvorak-Peck, S. (1993, February). National association of social workers communications network technical advisor guidelines. Los Angeles: NASW Communications Network, Inc.
- Elfin, M. (1992). The college of tomorrow: How multimedia computer technology is reshaping the way students learn and professors teach. U. S. News and World Report, 113, 110-112.
- EnterChange (1992). A survey of management practices during transition. Atlanta: EnterChange.
- Erdman, H. P., & Foster, S. W. (1988). Ethical issues in the use of computer-based assessment. Computers in human services, 3, 71-87.
- Falk, D. R., & Carlson, H. L. (1992). Learning to teach with multimedia. Technological Horizons in Education, 20, 96-101.
- Feldman, S. (1992). Children in crisis: The tragedy of underfunded schools and the students they serve. American Educator, 16, 8-12.

- Fields, D. M. (1993, January-February). Institutions for the 21st century. The Futurist, 27, 33-35.
- Finnegan, D. J., Ivanoff, A., & Smyth, N. J. (1991). The computer applications explosion: What practitioners and clinical managers need to know. Computers in Human Services, 8, Binghamton: Haworth.
- Fischbein, H., & Glassman, U. (1991). The advanced seminar for field instructors: Content and process. In, Schneck, D., Grossman, B., & Glassman, U., (Eds.). Field Education in Social Work. Dubuque, IA: Kendall/Hunt.
- FitzGerald, M., & Olsen, H. (1993, January/February). Genesis of multimedia social sciences curriculum. EDUCOM Review, 28, 36-41.
- Forsha, H. I. (1992). The pursuit of quality through personal change. Milwaukee: American Society of Quality Control.
- Freels, M. A., & Patton, S. (1992). Distance learning, Kentucky style. Technological Horizons in Education, 19, 69-71.
- Freeston, K. R. (1992). Getting started with TQM. Educational Leadership, 50, 10-13.
- Garcha, R., & Gatten, J. N. (1990). Preliminary observations of non-traditional university students' library skills. Library Review, 39, 13-20.
- Garcia, J. M. (1992). Electronic field trips: Real world encounters in your classroom. T.H.E. Journal, 20, 60-62.
- Gehlauf, D. N., Schatz, M. A., & Frye, T. W. (1991). Faculty perceptions of interactive television instructional strategies: Implications for training. The American Journal of Distance Education, 5, 20-28.
- Gellert, G. (1990). Looking toward 2000: Challenges for the coming decade: Specialization, isolation and, values in public policy curricula. Harvard Public Policy Review, 7, 79-84.

- Germain, Carel B. (Ed.) (1979). Social work practice: People and environments. New York: Columbia.
- Gerstner, L. V., Jr. (1990). Next century schools: America's toughest assignment. Washington: RJR Nabisco Foundation.
- Gibbs, L. (1990). Using online databases to guide practice and research. Computers in Human Services, 7, 97-116.
- Glover, R. H., & Holmes, J. (1983). Assessing the external environment. (ERIC Document Reproduction Service No. EJ 288 351)
- Gore, A., Jr. (1992). The information infrastructure and technology act. EDUCOM Review. 27, 26-29.
- Green, K. C., & Eastman, S. (1991). Campus Computing 1991: The EDUCOM USC survey of desktop computing in higher education. Los Angeles: The Center for Scholarly Technology, University of Southern California.
- Greundger, F. (1986). Computer applications in social work education. Computer Applications in Social Work and Allied Professions, 3, 111-126.
- Groff, W. H. (1983). Strategic planning for economic development. (ERIC Document Reproduction Service No. ED 236 394)
- Groff, W. H. (1986). Perspectives on the education and training system of the future. (ERIC Document Reproduction Service No. ED 272 772)
- Groff, W. H. (1987a). The learning community of the future: Education and training in the 21st century, (ERIC Document Reproduction Service No. ED 280 538)
- Groff, W. H. (1987b). Preparing transformational leaders in vocational, technical, and occupational education (Report). Fort Lauderdale: Nova University. (ERIC Document Reproduction Service No. ED 290 860)

- Groff, W. H. (1989). Toward the 21st Century: Preparing strategic thinkers in vocational, technical, and occupational education. Fort Lauderdale: Nova University. (ERIC Document Reproduction Service No. ED 319 882)
- Groff, W. H. (1990a). High tech-high touch collaboration in helping the United States to develop learning communities of the future. Paper presented in Research in education, 26, Fort Lauderdale: Nova University. (ERIC Document Reproduction Service No. ED 327 651)
- Groff, W. H. (1990b). Toward the 21st century: Preparing strategic thinkers in graduate and postgraduate education. Paper presented in Research in education, 26. Fort Lauderdale: Nova University.
- Groff, W. H. (1991). Intrapreneurship in the era of smart homes, wired communities, fast systems, global networks, and fast forward learners in a borderless world. Paper presented at the Programs for Higher Education Annual Summer Institute at Nova University, Fort Lauderdale.
- Groff, W. H. (1992). Toward the 21st century: Preparing proactive visionary transformational leaders for building learning communities. Fort Lauderdale: Nova University. (ERIC Document Reproduction Service No. ED 352 126)
- Groff, W. H. (1992). Toward the 21st century: Preparing strategic thinkers in vocational, technical and occupational education for building learning communities. Fort Lauderdale: Nova University. (ERIC Document Reproduction Service No. ED 351 499)
- Groff, W. H., & Cope, R. G. (1988). Achieving excellence through strategic planning. (ERIC Document Reproduction Service No. ED 298 977)
- Halal, W. E. (1992). The information technology revolution. The Futurist, 26, 10-15.
- Hamilton, M. J. (1989). Andragogy and the off-campus librarian. In Barton M. Lessin (ed.), The Off-Campus Library Services Conference Proceedings. Mount Pleasant: Central Michigan University.

- Hassett, J. (1992, November). Predicting the costs of training. Training and Development, 46, 40-44.
- Hawthorne, L., & Holzman, R. F. (1991). Directors of field education: Critical role dilemmas. In D. Schneck, B. Grossman, & U. Glassman (Eds.), Field education in social work: Contemporary issues and trends. Dubuque: Kendall/Hunt.
- Hayman, J. (1993, January). Bridging higher education's technology gap in Africa. T.H.E. Journal, 20, 63-68.
- Herman, J. L., Asbacher, P. R., & Winters, L. (1992). A practical guide to alternative assessment. Alexandria: Association for Supervision and Curriculum Development.
- Hersey, P., & Blanchard, K. H. (1988). Management of organizational behavior. Englewood Cliffs, NJ: Prentice-Hall.
- Hixson, J., & Lovelace, K. (1992). Total quality management's challenge to urban schools. Educational Leadership, 50, 24-27.
- Holt, S. L. (1991, December). Video-delivered K-12 distance learning: A practitioner's view. T.H.E. Journal, 19, 59-63.
- Howley, C., Cahape, P., & Stowers, P. (1989, April). ERIC handbook for teachers in training, Charleston: Appalachia Educational laboratory.
- Hoyt, D. P., & Frye, D. (1972). The effectiveness of telecommunications as an educational delivery system (FINAL REPORT). Manhattan: Kansas State University. (ERIC Document Reproduction Service No. ED 070 318)
- Huh, U. (1993, January). Computers in education the the Republic of Korea. T.H.E. Journal, 19, 72-76.
- Jablonski, J. R. (1992). Implementing tqm: Competing in the nineties through total quality management. San Diego: Pfeiffer.
- Jamieson, D., & O'Mara, J. (1991). Managing workforce 2000. San Francisco: Jossey-Bass.

- Jedamus, P., Peterson, M. W., and Associates (1989). Improving academic management. San Francisco: Jossey-Bass.
- Jennings, Gerald L. (1988). Technology education: In pursuit of technological literacy. (ERIC Document Reproduction Service No. ED 296 722)
- Jennings, J. (1991) Teaching with Distance Education. (Videotape). New Haven: Southern Connecticut State University.
- Jennings, J., Siegel, E., & Baskind, F. R. (1992). Teaching techniques for instructional interactive television. Proceedings of Orlando Multimedia '92, Warrenton, VA: Society for Learning Technology.
- Johnston, W. B. & Packer, A. H. (1987). Workforce 2000. Indianapolis: Hudson Institute.
- Jones, R. E. & Wright, J. R. (eds.). (1986). Implementing technology education. Encino, CA: Glencoe.
- Kabat, E. J., & Friedel, J. (1990). The development, pilot-testing, and dissemination of a comprehensive evaluation model for assessing the effectiveness of a two-way interactive distance learning system. Davenport: Eastern Iowa Community College District. (ERIC Document Reproduction Service No. ED 332 690)
- Kahn, R. L. (1992). Overview of a statewide academic network: SUNYNet. T.H.E. Journal, 20, 85-87.
- Kaufman, R., & Hirumi, A. (1992). Ten steps to tqm plus. Educational Leadership 50, 33-34.
- Kieselev, B. G. (1993). The Soviet Union's large-scale program to computerize education. T.H.E. Journal, 19, 66-67.
- Kilpatrick, A. C. (1991). Differences and commonalities in BSW and MSW field instruction: In search of continuity. In, Schneck, D., Grossman, B., & Glassman, U, (Eds.) Field education in social work. Dubuque: Kendall/Hunt.
- Kiplinger, A. H., & Kiplinger, K. A. (1989). America in the global '90s. Washington: Kiplinger.

- Klinger, T. H., & Connet, M. R. (1992). Designing distance education learning courses for critical thinking. T.H.E. Journal, 20, 87-90.
- Kleinkauf, C., & Robinson, M. (1987, March). Audio-conferencing and social work education in Alaska. Human Services in the Rural Environment, 10, 29-31.
- Knowles, M. (1992). Looking into the future of higher education. Orlando: Nova University Programs for Higher Education Summer Institute.
- Kotter, J. P. (1990). A force for change: How leadership differs from management. New York: The Free Press.
- Kouzes, J. M., & Posner, B. Z. (1991). The leadership challenge. San Francisco: Jossey-Bass.
- Kruh, J. (1983). Student evaluation of instructional conferencing. In L. Parker & C. Olgren (eds.), Teleconferencing and electronic communications II, (293-301). Madison: University of Wisconsin Extension, Center for Interactive Programs.
- Kuramoto, A. (1984). Teleconferencing for nurses: Evaluating its effectiveness. In L. Parker & C. Olgren (eds.), Teleconferencing and electronic communications III (262-268). Madison: University of Wisconsin Extension.
- Lamb, J. A. (1990). Teaching computer literacy to human service students. Computers in Human Services, 7, 31-44.
- Lamendola, W. (1987). Teaching information technology to social workers. Journal of Teaching in Social Work, 1, 53-69.
- Landers, S. (1993, January). Colleagues connect for high-tech talks. NASW News, 38, 5.
- Levine, A., & Associates. (1990). Shaping higher education's future: Demographic realities and opportunities, 1990-2000. San Francisco: Jossey-Bass.

- Lucas, A. F. (1989). Motivating faculty to improve the quality of teaching. The department chairperson's role in enhancing college teaching. In A. F. Lucas Directions for teaching and learning, 37, 5-15. San Francisco: Jossey-Bass.
- Magner, D. K. (1989). Graduate schools of social work enjoying new boom as adults seek career changes and advanced degrees. The Chronicle of Higher Education, 26, p. 17.
- Mahoney, E. (1992). Increasing use of databases raises privacy concerns. Hartford Courant, 154, p. 1.
- Marcos, L. R. (1989). Media power and public mental health policy, American Journal of Psychiatry, 146, 1185-1189.
- Markoff, J. (1993). Building the electronic superhighway. The New York Times, pp. 1, 6.
- Marschak, E., & Glassman, U. (1991). Innovative models for field instruction: Departing from traditional methods. In D. Schneck, B. Grossman, and U. Glassman (Eds.), Field education in social work: Contemporary issues and trends. Dubuque, IA: Kendall/Hunt.
- Mesbur, E. S., & Glassman, U. (1991). From commitment to curriculum: The humanistic foundations of field instruction. In D. Schneck, B. Grossman, & U. Glassman (Eds.), Field education in social work: Contemporary issues and trends. Dubuque, IA: Kendall/Hunt.
- Middleton, J., Ziderman, A., & Adams, A. (1990). Making vocational education training effective. Finance and Development, 27, 30-32.
- Miller, H. (1986). The use of computers in social work practice: An assessment. Journal of Social Work Education, 22, 52-60.
- Morgan, W., & Sheets, F. M. (1992). The interactive global classroom: A model from the DoDDS. T.H.E. Journal, 19, 60-62.
- Morkin, C. (1993, February). Outsourcing: Worst nightmare or useful idea? Communication News, 30, 38.

- Morrison, J. L. (1990) Using futures research in college and university planning: A handbook for planners in higher education. (ERIC Document Reproduction Service No. ED 323 866)
- Munson, C. (1988). Microcomputers in social work educationa. Computers in Human Services, 3, 143-157.
- Naisbitt, J., & Aburdene, P. (1990). Megatrends 2000. New York: Avon.
- NASW News. (1991 March). Goals developed for education in year 2000. National Association of Social Workers, 13, p. 1. Bethesda.
- NASW News, (1991, February). Global exchange is primary goal of "worldworks." National Association of Social Workers, 6, 17. Bethesda.
- Nelson, R. N. (1985). Two-way microwave transmission consolidates, improves education. NASSP Bulletin 69, 38-42.
- NewTek (1992). Revolution: A demonstration of the video toaster (videotape). Bloomington, MN: NewTek.
- Nordruft, W. E. (1989). Schoolworks: Reinventing public schools to create the workforce of the future. Washington: The Brookings Institution and the German Marshall Fund of the U.S.
- O'Neill, J. (1992, December). Schools pushed to restructure around student outcomes. ASCD Update, 34, p. 1. Alexandria: Association for Supervision and Curriculum Development.
- Ornstein, A. C., & Hunkins, F. P. (1988). Curriculum: foundations, principles, and issues. Englewood Cliffs: Prentice-Hall.
- Ostertag, V. (1991). A multi-tech distance learning environment: A model for the Nova University Programs for Higher Education. Unpublished doctoral dissertation, Fort Lauderdale: Nova University.

- Otto, C. P., & Glaser, R. O. (1970). The management of training: A handbook for training and development. Reading: Addison-Wesley.
- Parnell, D. (1990). Dateline 2000: The new higher education agenda. Washington: Community College Press.
- Pautler, A. J. (1990). Vocational education in the 1990's: Major issues. Ann Arbor: Prakken.
- Peterson, M. W. (1989). Analyzing alternative approaches to planning. In P. Jedamus, M. W. Peterson, and associates (Eds.), Improving academic management: A handbook of planning and institutional research. San Francisco: Jossey-Bass.
- Plum, T. (1991). The widening gyre: Electronic reference services at the Homer Babbidge Library. Harvest: The University of Connecticut Libraries, 23, 1-8.
- Popcorn, F. (1991). The Popcorn report. New York: Doubleday.
- Portway, P. S. (1993, February). How corporate America trains by telecommunications. Communication News, 30, 23.
- Purcell, J. D. (1992). Challenges of reforming education. Autodesk, inc.: Supplement to T.H.E. Journal, October, 1992, 2-4.
- Puzzouoli, D. (1970). A study of teaching university extension classes by tele-lecture. Morgantown: West Virginia University. (ERIC Document Reproduction Service No. ED 042 961)
- Raskin, M. S. (1988). Factors associated with student satisfaction in undergraduate social work field placements. In M. Raskin (Ed.), Empirical studies in field instruction. New York: The Hawthorne Press.
- Raskin, M., Skolnick, L., & Wayne, J. (1991). An international perspective of field instruction. Journal of Social Work Education, 27, 258-270.

- Raymond, F. B. (1988). Providing social work education and training in rural areas through interactive television. (ERIC Document Reproduction Service No. ED 309 910)
- Reamer, F. G. (1986). The use of modern technology in social work. Social Work, 31, 469-472.
- Reed, C., Ruhala, T., & Freddolino, P. (1988). A professional school without walls: Four experiments in extending human service education to distant learners. The distant learner in the human service professions: A reader, 88-96. Columbia: University of South Carolina.
- Remez, M. (1992, May 26). Long-distance learning put to the test at UTC. Hartford Courant, 154, p. 6.
- Rich, T. (1991). Computer technology and education: Past performance and future promise. Educational and Training Technology International, 28, 147-153.
- Rosenbach, W. E., & Taylor, R. L. (1989). Contemporary issues in leadership. Boulder: Westview Press.
- Rothwell, W. J., & Kazanas, H. C. (1989). Strategic human resource development. Englewood Cliffs: Prentice-Hall.
- Rowell, D. (1992). Sound explosion: Shopping for a multimedia upgrade. PC Sources, 3, 228.
- Schneck, D. (1991a). Arbiter of change in field education: The critical role for faculty. In D. Schneck, B. Grossman, & U. Glassman (Eds.), Field education in social work. Dubuque, IA: Kendall/Hunt.
- Schneck, D. (1991b). Ideal and reality in field education. In D. Schneck B. Grossman, & U. Glassman (Eds.), Field education in social work: Contemporary issues and trends. Dubuque, IA: Kendall/Hunt.
- Schneck, D. (1992). The activist educator. Annual Field Work Symposium, Council on Social Work Education Annual Meeting, Kansas City, MO.

- Schneck, D., Grossman, B., & Glassman, U. (1991). Field education in social work: Contemporary issues and trends. Dubuque: Kendall/Hunt.
- Shale, D. (1988). Toward a reconceptualization of distance education. The American Journal of Distance Education, 2, 25-35.
- Shane, H. G. (1973). Learning designs for tomorrow, in The educational significance of the future. Phi Delta Kappan, 2, 12-16.
- Shapiro, J. J., & Hughes, S. K. (1992). Networked information resources in distance graduate education for adults. Technological Horizons in Education, 19, 66-69.
- Sheafor, B. W., & Jenkins, L. E. (1982). Quality field instruction in social work. New York: Longman.
- Sheingold, K. (1991). Restructuring for learning with technology: The potential for synergy. Phi Delta Kappan, 2, 17-27.
- Sheridan, J. (1986) Andragogy: A new concept for academic librarians. Research Strategies, 4, 156-167.
- Shirkenbach, W. W. (1988). The Deming route to quality and productivity. Washington: CEEPress.
- Shirley, R. C. (1988). Strategic planning: An overview. (ERIC Document Reproduction Service No. EJ 384 146)
- Sinecrope, R. F., & Cournoyer, D. E. (1990). Validity of student ratings of field instruction. Journal of Social Work Education, 26, 266-272.
- Soloway, E., Guzdial, M., & Hay, K. E. (1993, January, February). Reading and writing in the 21st century. EDUCOM Review, 28, 26-29.
- Skolnick, L. (1988). The state of the art in field instruction: A century of progress?. In M. Raskin (Ed.), Empirical studies in field instruction. New York: Haworth Press.

- Staff (1992). CSWE receives fourth psychopharmacology grant: Satellite telecast planned. Social Work Education Reporter, 35, p. 1.
- Steffen, S. S. (1988). Designing bibliographic instruction programs for adult students: The Schaffner Library experience. Information Reports and Bibliographies, 70, 644-649.
- Stewart, R. P. (1988). Social work practice in a high tech era. Computers in Human Services, 3, 191-203.
- Strain, J. (1987, February). The role of the faculty member in distance education. The American Journal of Distance Education, 1, 61-65.
- Stufflebeam, D. L. (1971). The relevance of the CIPP evaluation model for educational accountability. Journal of Research and Development in Education, 5, 19-25.
- Taylor, F. G. (1992, July 15). In 2000, employers can expect to see a new worker. Hartford Courant. p. 1.
- Thurrow, L. C. (1990). Vocational education as a strategy for eliminating poverty. Paper presented at the Harvard University seminar on work and education, Boston.
- Timko, J., & Downie, J. (1991). Statistics on software. Orange, CA: Statistics for management.
- Tomaiuolo, N. G. (1990). Reconsidering bibliographic instruction for adult reentry students: Emphasizing the practical. Reference Services Review, 18, 49-54.
- Trecker Library (1990). How to search social science citation index (ssci), cd-rom. West Hartford: University of Connecticut.
- Valli, G., & Dauman, J. (1985). Designing and installing a system for environmental assessment and forecasting. In J. S. Mendell (Ed.), Nonextrapolative methods in business forecasting. Westport, CT: Quorum.
- Vayda, E., & Bogo, M. (1991). A teaching model to unite classroom and field. Journal of Social Work Education, 27, 271-278.

- Verduin, J. R., & Clark, T. A. (1991) Distance education. San Francisco: Jossey-Bass.
- Verspoor, A. (1990). Educational development: Priorities for the nineties. Finance and Development, 27, 20-23.
- Wagner, C. A., & Picciano, A. G. (1993). The view from within. EDUCOM Review, 28, 30-35.
- Walton, M. (1990). Deming management at work. New York: Putnam.
- Weizenbaum. (1967). Contextual understanding by computers. Communications of the ACM, 10, 474-480.
- Wigglesworth, D. C. (1992, December). Videoing diversity: A review of training videos on workforce diversity. Training and Development, 46, 53-59.
- Wyman, A. (1987). A library instruction program for individuals with inquiring minds and a lifetime of experience. Research Strategies, 7, 87-89.
- Yankelovich, D., Popcorn, F., & Gordon, T. J. (1992). Business and the future: A round table discussion. The Futurist, 26, 23.
- Young, R., & McLelland, S. (1991). Training personnel for distance learning programs: The mississippi star schools model." T.H.E. Journal, 19, 83-86.

APPENDIXES

Appendix A

Student Questionnaire

DIRECTIONS: The following questions concern your knowledge of technology re: your studies and your field work. There are no "right" or "wrong" answers. Please indicate as follows: "U" = Unfamiliar, "F" = Familiar, "VF" = Very Familiar.

How familiar are you with the following? (Circle)

- | | | | |
|---|---|---|----|
| a. Do you know what "Distance Education" is? | U | F | VF |
| b. How familiar are you with telecommunications and the satellite transmission of live conferences, seminars, distance education in classrooms? | U | F | VF |
| c. Have you become familiar with the use of technology (CD-ROM) for library searches? | U | F | VF |
| d. Are you familiar with "Off Campus Library Searches?" | U | F | VF |
| e. What types of technology does your field agency use? (Circle) | Audiotapes
Videotapes
Computers
Modems for computer
CD-ROM searches
Satellite receiving facilities | | |

Satellite
sending
facilities

f. My agency is a (hospital, family agency,
school, etc.) or "no placement."_____.

Appendix B

The University of Connecticut School of
Social Work Plan

In June, 1992, a report was submitted to the Faculty and Administration entitled: "The Development of an Articulation Plan for the University of Connecticut School of Social Work and Practicum Agencies." In this substantive report, a number of suggestions were made about improvements to the School which could be made over the next five years by using a strategic planning process.

The present strategic plan concerns the use of an approach that could be used which would upgrade and enhance the educational process at UCONN. This concerns the growing opportunities for the use of distance education at the school.

Historically, UCONN participated in an early distance education program more than 10 years ago in the Northern New England Program. This was a branch campus program which provided graduate level courses for students in Vermont, New Hampshire, and Maine. Television broadcasting sites were used at the Mary Hitchcock Hospital in Hanover, New Hampshire, and the Mary Fletcher Hospital in Burlington, Vermont.

Study Methods and Findings

A survey has been sent to 124 directors of field education in graduate schools of social work in Canada and the United States. Many schools are at varying states of development relative to interactive television used for distance education. Some are beginning to use it as is being done at the Southern Connecticut State University School of Social Work while others have not begun to use the technology. The preliminary examination of raw data indicates that many schools have educational media centers that might provide networking services for the production of distance education programs.

It is clear from an extensive literature search that the larger field of education and particularly higher education are beginning to use this modality (Verduin, 1991). At a regional school like UCONN, this type of teaching could facilitate the broadcasting of classes at long distances throughout the region. Examples of the national scope of this approach come from the experience of Professor Mary Fran Libassi, who has worked on the production of videotapes on psychopharmacology which have been broadcast nationally by satellite for the past few years.

Graduates of the school such as Tina Davies, Cathy DeVeau, and Ron Gould, have pioneered the efforts to produce videotapes about topics closely related to social work. These have been aired nationally and internationally. A later production is a 15-minute videotape concerning a pilot distance education program created at the school by Jack Conklin and colleagues. This was also presented at the Annual Program Meeting of the Council on Social Work Education in March, 1993. This was shown at the Field Education Symposium in New York City.

Vision of the Future

Linked to a future-based approach suggested by Groff (1989) of Nova University, one way to do academic planning is to develop scenarios to provide for a variety of contingencies in the years to come. Predictions are based upon optimistic, pessimistic and realistic scenarios.

Substantial literature is available which documents the desirability of moving toward the enhancement of higher education by using distance education. This term refers to an educational process during which the teacher and learners are separated much of the time. It is performed under formal

educational auspices. Interactive television used in combination with a variety of other media such as telephones, fax machines and computers can provide two-way communication for the teacher and the student. This can be done in school, at job sites or in social agencies which train social work interns. Verduin and Clark (1991) define distance education as "formal learning which occurs when a majority of the instruction is performed with the educators and learners at some distance from one another" (p. 8).

Optimistic Scenario

An optimistic scenario would be that the Educational Policy Committee would begin to develop a five-year planning process which would include the possibility of beginning to teach some courses via the distance education approach. At the present time, the Hartford Graduate Center has established a Distance Education Consortium that includes the business community, the University of Connecticut, the Connecticut State University system and the Community College system. Connecting some of these programs with The School of Social Work and Connecticut Public Television (CPTV) would provide up-link access so that programs could be broadcast to sites in many areas.

The Vice President of CPTV recently noted that "We already have the technology in Connecticut to produce distance education programs. What we need are people who are interested in making this technology work for the schools and businesses of Connecticut" (A.Steel, Jr., personal communication, January 20, 1993).

Hopefully, the Educational Policy Committee will begin a planning process using materials which are already available, to begin to implement a distance education program. With the support of the administration, this type of thinking could put UCONN in the forefront of schools which are already developing distance educational approaches such as Southern Connecticut State University.

Pessimistic Scenario

A pessimistic scenario could emphasize the many options the many options which exist presently for a lack of forward progress. Many rationales for no growth could be made based upon the economic situation of Connecticut, the University, the region and the nation. Also, traditional issues about confidentiality could be used as stumbling-blocks to exploration, development and planning. Another approach would be to

ignore this report, or send it undeveloped to the desk of the administrator where it might not be enacted. Thus, change would be stalled.

Realistic Scenario

Taking several of the directions implied above, if UCONN does not do very much about distance education, it will certainly be drawn into it at some future date. This position emanates from the fact that other schools and universities in the state are quite interested in that approach such as the Connecticut State University System, and the new Community and Technical colleges. The business community from Hamilton Standard, Aetna, and United Technologies are beginning to identify this technology as a method by which workers can be retrained on the job site. This can assist in the development of new jobs that Connecticut needs to create now that the defense industry has changed so radically and other companies are downsizing.

It is wise to be visionary in planning for the future by joining with other schools of higher education in the development of the technology for use at UCONN. If avoidance is practiced, programs and products may be developed for the school which have little to do with the ethics and values of social work

education (Cnaan, 1989). Other institutions and other professions may begin to emphasize collateral degrees such as child welfare or family therapy competitively.

Action Plan

- a. Begin to discuss this plan at the next several Educational Policy Committee meetings (1993-94).
- b. Establish an Educational Technology Committee which can examine the nature of the course materials which could most easily be produced for transmission via distance education.
- c. Begin discussions with the Office of the Dean relative to policies, University regulations, funding, support from the President and similar issues regarding distance education.
- d. Spend the next two years (1994-96) linking with other involved educational facilities in Connecticut which are already developing distance education programs like Southern Connecticut State University in New Haven.
- e. Continue the dialog with CPTV which has already approached the School on several occasions.
- f. Begin to work on the development of various types of curriculum offerings so that during the following academic year (1995-96), several courses can be

field-tested through increased collaboration with the John Dempsey Hospital which is linked to satellite transmission through CPTV.

g. Through both formative and summative evaluation, refine and redesign course material for presentation in the next two academic years (1996-1998).

REFERENCES

Cnaan, R. (1989). Introduction: Social work practice and information technology--An unestablished link. Computers in Human Services, 5, 1-15.

Groff, W. (1989). Toward the 21st century: Preparing strategic thinkers in vocational, technical and occupational education. (ERIC Document Reproduction Service No. ED 327 651)

Verduin, J. R., & Clark, T. A. (1991). Distance education. San Francisco: Jossey-Bass.

Appendix C

Curriculum Materials and Teaching Strategies

In order to teach social workers about the potential uses of distance education, specific approaches need to be developed. The first concerns the importance of conducting a needs assessment to see what the needs of the organization are, what specific educational jobs need to be done, what the needs of specific faculty and students are, and what the objectives are. Also, a plan for evaluating outcomes should be developed.

Overall Teaching Strategies and Skill Building

The first objective is to develop an audit and assessment of UCONN and the NAFEDN. Some of this information was obtained from the student questionnaires at UCONN and the NAFEDN questionnaire sent to Canada and the United States. This will assist in the building of knowledge about distance education. At this stage, it is not the intent to provide individuals with extensive information but to instruct them in general familiarity about what distance education can do. This can be accomplished through the showing of a videotape which was produced for showing at the CSWE conference, distribution of both a

professional article on the topic as well as a technology manual, and the provision of a bibliography about the topic. Informative presentations can be made and questions can be answered about application models.

At a second level, some experiential training could be provided to interested individuals through the classroom format. Since distance education is related closely to video production, demonstrations could be made of videocamera operation, simple editing functions, operation of various pieces of equipment such as a tripod, camera, and television set to play back productions.

At the third level of expertise, individuals could be introduced to editing procedures through attendance at workshops conducted by local cable access network stations. There, they would learn simple video production procedures such as developing a story line, shooting indoor and outdoor footage, developing cover shots, editing procedures, dubbing in sound and voice-over tracks, operating a character generator and making duplicate copies. Also, they would be further exposed to the work conducted in a television studio.

At the fourth level, individuals should visit a public or commercial television station to determine

how tape is used for transmission via up-link satellite transmission. Simultaneously, an educational media department of a college or university should be visited. This would both expose learners to the facilities of a media studio and they could learn how tapes are made.

At the fifth level, learners should begin to develop a script about a specific social work theme or social issue so as to begin videotape production. Working with individuals who are trained in directing, producing, plus camera and editing work would be the preferred way to learn in a mentoring process.

Finally, an evaluative vehicle should be used for the monitoring of progress and the identification of specific areas which need strengthening. A specific model such as the "plan-do-check-act" paradigm of Deming (Shirkenbach, 1988) can be used or another evaluative model such as the "context-input-process-product" model of Stufflebeam (1971).

Instructional methods inherent in each process involve many specific steps. The most important ingredients involve having the mentor demonstrate how videotapes are made or studio presentations are done for transmission by satellite. Specific texts like

Distance Education by Verduin and Clark (1991) and Anglin (1991) Instructional Technology: Past Present, and Future are helpful in understanding how distance education evolved and instructional media are developed in practice.

Curriculum Ingredients

Incorporation of the latest scholarship

An ideal curriculum will incorporate the most up-to-date information about distance education and technology. This is important since the development of newer technologies proceeds so rapidly that new products and applications appear in the literature frequently. Technology magazines such as T.H.E. Journal are an important source of information.

Provision of a wide range of knowledge

The curriculum should also provide each learner with a wide range of knowledge about how technology can be applied to social work education and practice. Many times in the past, movie film was used as an aid to professional education. Now, videotapes can be used in the same way. The difference is that when a distance education format is used, transmission of data can take place interactively regardless of geographic distance.

It takes time to develop new applications for the teaching of social work techniques. Again, the teacher serves as the mentor or interpreter to the learner, a necessary ingredient.

Encompassing the present

In this sense, much of the present can be preserved since distance education can be used with videotape to save recordings of key events. The videotapes can be used for archival storage. Not enough of the major presentations by famous social work writers and thinkers have ever been preserved except in book form. Now, there is an opportunity to transmit presentations at long distances while keeping the material on videotape for posterity.

Use of multiple sources

Depending on the topic, such as diversity and multicultural education, a variety of written materials can be used. This will offer several perspectives to give learners an opportunity to form opinions based on a range of points of view.

Use of local community experts

A curriculum which uses distance education as a medium for social work can incorporate the information,

ideas, and perspectives of multiple resources from both the academic and practice communities. In some cases, participants could be recipients of social services who wish to testify as to their personal experiences. An equitable approach would be to gather information from those who are pleased with their assistance, counseling or interventions as well detailed information from those who are not.

Curriculum coordination

An ideal curriculum would coordinate content and integrate well with other courses in the curriculum. At a school of social work, the curriculum involving distance education should blend well with other courses in that personal/environmental problems and individual, group and community approaches would be found for the resolution of social issues. Using this as a broad theme, specific approaches to poverty, racism, homelessness, domestic violence, juvenile delinquency, substance abuse, and the care of the chronically mentally ill could be woven into themes which might be handled "live" through distance education and interactive television. The production could be tape-recorded, saved for viewing on a VCR and the

material discussed again in a classroom or field agency. Thus, there are two potential applications of the technology to the discussion of social interventions, the one in real time and the later one via videotape.

Variety in teaching and learning styles

Technology can be used to promote a wide variety of teaching and learning styles. Individual styles of learning can be strengthened as students can take home videotapes to study at their leisure. Faculty members in schools and social work agencies can develop assignments which are provocative and involve the analysis and intervention in case situations which are taken from real-life situations. Students can learn from watching tapes of individuals and families rather than using the textbook case method model of study.

Evaluation and competency building

Finally, the curriculum can include testing and evaluation procedures so as to measure the development of critical thinking skills and competency in the provision of social services. Testing procedures would include the viewing of taped interviews, group therapy, family therapy or community interventions. Programmed learning approaches would lead to the completion of

examinations. Incorrect responses could lead to the development of a list of case examples which should be reviewed again prior to the taking of the next examination. This would point directly to concepts or techniques which had not been thoroughly mastered.

REFERENCES

- Anglin, G. J. (1991). Instructional technology: Past, present, and future. Englewood, CO, Libraries Unlimited.
- Shirkenbach, W. W. (1988). The Deming route to quality and productivity. Washington: CEEPress.
- Stufflebeam, D. L. (1971). The relevance of the CIPP evaluation model for educational accountability. Journal of Research and Development in Education, 5, 19-25.
- Verduin, J. R., & Clark, T. A. (1991). Distance education. San Francisco: Jossey-Bass.

Appendix D

Analysis of Average Costs

The first estimate concerns predicted costs associated with creating distance education training materials. The second refers to fee comparisons by several distance education vendors at Oklahoma State University. The third concerns the purchase of equipment developed by Global Technologies Enterprises (GTE) (S. Souters, personal communication, February 12, 1993). The fourth concerns an estimate made about distance education at UCONN.

Development of Training Materials

Hassett (1992) notes that the estimated time for developing a training program to use in a distance education format varies according to how the program is developed. Instructor-led courses took from 28 to 315 hours to prepare for each hour of classroom presentation. Self-study materials, ranged from 80 to 345 hours of development time per hour.

One way to calculate cost is based on multiplying the faculty member's hourly salary times the length of time of preparation depending upon the format selected. Hassett (1992) notes that development costs must also include travel, lodging, and meals. Finished training

programs with training packages can be used repeatedly for any size audience. Initial costs are balanced by the profit from tuition fees for classes, workshops, or continuing education programs. The author considered that this could become significant over time.

Average Costs at the Oklahoma State University

Distance Education Program

The College of Arts and Sciences Teleconferencing Service (ASTS) at Oklahoma State University has delivered educational programming via satellite and cable throughout the U. S. since 1984. Approximately 1000 schools in 42 states receive ASTS courses in science, mathematics, and foreign languages. Holt (1991) states that the courses are sent to many sites in North America, including Southern Canada, most of Alaska, and Northern Mexico.

All courses are taught by university faculty who have an earned doctorate. Curriculum design and course content are their responsibility. Courses are taught via satellite (Westar IV) using one-way video and two-way audio. Faculty are on the air two to three times a week. Extensive computer-assisted instruction (CAI) packages are provided also provided to students.

Holt (1991) notes that "... to develop a two-semester course requires \$250,000 to \$600,000" (p. 60). The price variation depends on whether the CAI package is included. The CAI costs an additional \$350,000. The technology can be used over and over which brings the ultimate cost of the program down. Holt present comparative figures from seven vendors. The estimates vary considerably in costs. However, some comparative fees from several vendors are that individual costs to each student range from \$490.00, \$580.00, \$600.00, \$625.00, to a high of \$725.00 per student, and a low of \$150.00 per student if the population of from 1-50 students. The mean cost is estimated at \$528.00 per student for each distance education course.

GTE Estimate of Equipment Costs

The third set of estimates concerns equipment costs for distance education (P. VanLandingham, personal communication, February 5, 1993). As may be inferred from the MARP, front end investment may not be necessary if universities have equipment at their informational technology departments. If a given university does not own any equipment, costs are given for equipment and refurbishing and sound-proofing of regular classrooms. According to this estimate,

start-up costs would be \$92,043.19. Additional costs are given under the options which are presented.

OPTIONS					
VHS/SVHS VCR	Panasonic	AG-1970	1	\$1,704.55	\$1,704.55
Acoustic Treatment of Ceiling	Ceiling	Custom	1	\$6,000.00	\$6,000.00
Acoustic Treatment of Walls	Walls	Custom	1	\$14,750.00	\$14,750.00
Video Disk Player	Sony	LDP-1550	1	\$1,816.18	\$1,816.18
Still Video Rec/Player	AG-810	Panasonic	1	\$1,441.18	\$1,441.18
72" Rack for equipment	ATE	70RACK	1	\$1,319.11	\$1,319.11
5" B&W Rack mount Monitor	Panasonic	WV-5203B	1	\$1,095.59	\$1,095.59
Desk top microphone	Shure	SM91A	1	\$303.93	\$303.93
Microphone Cable	ATE	Lot	1	\$88.24	\$88.24
Custom Controller panel	AMX	Access	1	\$8,235.30	\$8,235.30
LCD Control Panel	AMX	EL+	1	\$3,676.47	\$3,676.47
Custom Equip. Cabinet	ATE	CABMON-235	1	\$2,529.41	\$2,529.41
Audio Amp.	University	Ur-2608	1	\$752.84	\$752.84
Audio Mixer	Shure	M268	1	\$308.24	\$308.24
3 Chip Video Camera	Panasonic	WV-F250BH	3	\$4,375.00	\$13,125.00
Camera AC adaptor	Panasonic	WV-PS31	3	\$544.11	\$1,632.34
Tripod Mount Adaptor	Panasonic	WV-QB70	3	\$183.83	\$551.48
50' Camera Cable	Panasonic	32A-50	3	\$588.24	\$1,764.71
12X Zoom Lens	Fujinon	S12X7.5BMDC	3	\$2,492.65	\$7,477.95
Pan/Tilt camera mount	Vicon	V6150PT	3	\$3,919.11	\$11,757.34
Controller for Pan/Tilt	Vicon	V7100C	1	\$4,845.59	\$4,845.59
50' controller cable	Vicon	V7700R	3	\$2,933.83	\$8,801.48
Zoom/Focus Motor Drive	Vicon	V6634LM	3	\$367.65	\$1,102.95
25" Color Monitor	Panasonic	CT2583VY	1	\$1,058.83	\$1,058.83
Ceiling Monitor Mount	Peerless	1452-234	1	\$248.35	\$248.35
Monitor Cables	ATE	LOT	1	\$95.59	\$95.59
Acoustic Echo Cancellor	Coherent	APS-224-z	1	\$10,170.59	\$10,170.59
Wireless Mic System	Telex	FMR-100	1	\$488.24	\$488.24
Video Switcher w/remote	VideoTek	RS12RC	3	\$1,539.70	\$4,619.10
Color Sync & Test Gen.	VideoTek	VSG-21	1	\$1,111.76	\$1,111.76
Black Burst Generator	VideoTek	Times Six	1	\$2,677.94	\$2,677.94
Video Distribution Amp.	VideoTek	VDA-16	1	\$337.50	\$337.50
600 Lum. Video Proj.	Sony	VPH-1000Q	1	\$5,647.06	\$5,647.06
Projector ceiling mount	Sony	PSS-722	1	\$279.41	\$279.41
Labor for installation	GTE ACT		1	\$14,250.00	\$14,250.00
				TOTAL	\$92,043.19

Figure 1. GTE Estimate of Equipment Costs

University of Connecticut Media Center

Another option exists for those universities which have equipped classrooms or sound stages with much of the equipment needed to receive satellite transmissions of distance education programming, so-called "down-link" capability. A satellite transmission truck can be rented to provide the capability of sending programming to various sites (personal communication, M. Field, January 13, 1993). The cost for this is said to be \$4000 for the rental of the satellite transmission truck for several hours plus a cost of \$250 per hour to transmit the program or class.

Costs to UCONN

Upon review of these estimates, it would appear that it would cost at least \$92,000 to equip a classroom at UCONN to begin to use distance education. Presuming that UCONN did not use any of the facilities of the University of Connecticut Media Center, additional costs could be estimated from the ASTS estimates regarding the time and costs for the development of training materials. If one followed Holt's (1991) estimate, the cost for developing a two-semester course would be about \$250,000.

An interesting response to figures of this magnitude is that administrators quickly think that distance education is too expensive. What is needed is a cost benefit analysis in which a projection is made over time of how profitable a single distance education course can be. For example, the average class size at UCONN is 25-30 students. If the students were charged the mean figure given above of \$528.00 per course multiplied by two semesters, the return would be approximately \$32,000. However, if the distance education projection of the courses were to a half dozen sites with the same enrollment, the return would be an additional \$192,000 in revenues.

All of this is theoretical at this point but the estimate of costs and the estimate of returns would mean that following an initial investment, the return to the university could be quite substantial. Also, it could happen quickly. Unfortunately, this seems to be an overlooked fact in an economy where administrators are attempting to cut back on programs rather than to develop a supply-side economic attitude in which more students are reached at greater distances for more tuition fees. Eventually, this will be worked out when other schools begin more distance education courses.

Conclusion

Several avenues of approach are suggested by these preliminary studies. Universities may purchase technology, train faculty to develop distance education curricula, and present lectures on interactive television. Class lectures can be transmitted long distances via fiberoptic cables, satellites, microwave or compressed video transmission.

Another alternative to purchasing equipment which quickly becomes outdated would be to use a process that is termed "outsourcing." In this format, Morkin (1993) notes that vendors of various forms of technology lease the equipment. Companies which provide this service manage the entire process from planning and cost benefit analysis to the installation and monitoring of equipment and programming. An advantage of this approach over the purchase of equipment is that the technology is changing so fast such vendors continually purchase the state-of-the-art technology. Universities may find that this is more cost-effective than purchasing new equipment which must constantly be upgraded to keep current with innovations.

Portway (1993) claims that Hewlett-Packard's Distance Learning System delivers training at half the

cost of traditional classes. Hewlett-Packard claims that because of their experience, they can create courses faster. They already have a world-wide system in place that universities can use rather than starting new programs.

An inductive point inherent in these observations is that distance education now is being offered by the private sector to colleges and universities. In a free enterprise system, there are bound to be great variations in price and quality as to what facilities and products are available due to competition in the open market-place. Similar to the costs of technology, the price of distance education production will also drop further in the future.

Appendix E

Evaluation Strategies

This appendix concerns several models which can be used to test the effectiveness of distance education related to student learning and outcome measures. As they are designed, they can be employed to assess institutional outcomes related to distance education, or they could be used to measure the specific classroom outcome of a given course.

Several models have been selected from a text by the Association for Supervision and Curriculum Development entitled: A Practical Guide to Alternative Assessment, by Herman, Asbacher and Winters (1992). The authors offer models called "Linking Instruction and Assessment: Implications from Cognitive Learning Theory" and "Assessment Alternatives" (see Figures 2 & 3). These models can be used to measure distance education outcomes when combined with standard research methods using questionnaires on a pre-test and post-test basis. Statistical comparisons can be made between mean scores or by using student satisfaction rating scales measured through the use of statistical measures such as the Chi-Square or similar inferential statistical measures.

Theory: Knowledge is constructed. Learning is a process of creating personal meaning from new information and prior knowledge.

Implications for Instruction/Assessment:

- Encourage discussion of new ideas.
- Encourage divergent thinking, multiple links and solutions, not just one right answer.
- Encourage multiple modes of expression, for example, role play, simulations, debates, and explanations to others.
- Emphasize critical thinking skills: analyze, compare, generalize, predict, hypothesize.
- Relate new information to personal experience, prior knowledge.
- Apply information to a new situation.

Theory: All ages/abilities can think and solve problems. Learning isn't necessarily a linear progression of discrete skills.

Implications for Instruction/Assessment:

- Engage all students in problem solving.
- Don't make problem solving, critical thinking, or discussion of concepts contingent on mastery of routine basic skills.

Theory: People perform better when they know the goal, see models, know how their performance compares to the standard.

Implications for Instruction/Assessment:

- Discuss goals; let students help define them (personal and class).
- Provide a range of examples of student work; discuss characteristics.
- Provide students with opportunities for self-evaluation and peer review.
- Discuss criteria for judging performance.
- Allow students to have input into standards.

Theory: It's important to know when to use knowledge, how to adapt it, how to manage one's own learning.

Implications for Instruction/Assessment:

- Give real-world opportunities (or simulations) to apply/adapt new knowledge.
- Have students self-evaluate: think about how they learn well/poorly; set new goals, why they like certain work.

Theory: Motivation, effort, and self-esteem affect learning and performance.

Implications for Instruction/Assessment:

- Motivate students with real-life tasks and connections to personal experiences.
- Encourage students to see connection between effort and results.

Theory: Learning has social components. Group work is valuable.

Implications for Instruction/Assessment:

- Provide group work.
- Incorporate heterogeneous groups.
- Enable students to take on a variety of roles.
- Consider group products and group processes.

**Figure 2. Linking Instruction and Assessment:
Implications from Cognitive Learning Theory.**

BEST COPY AVAILABLE

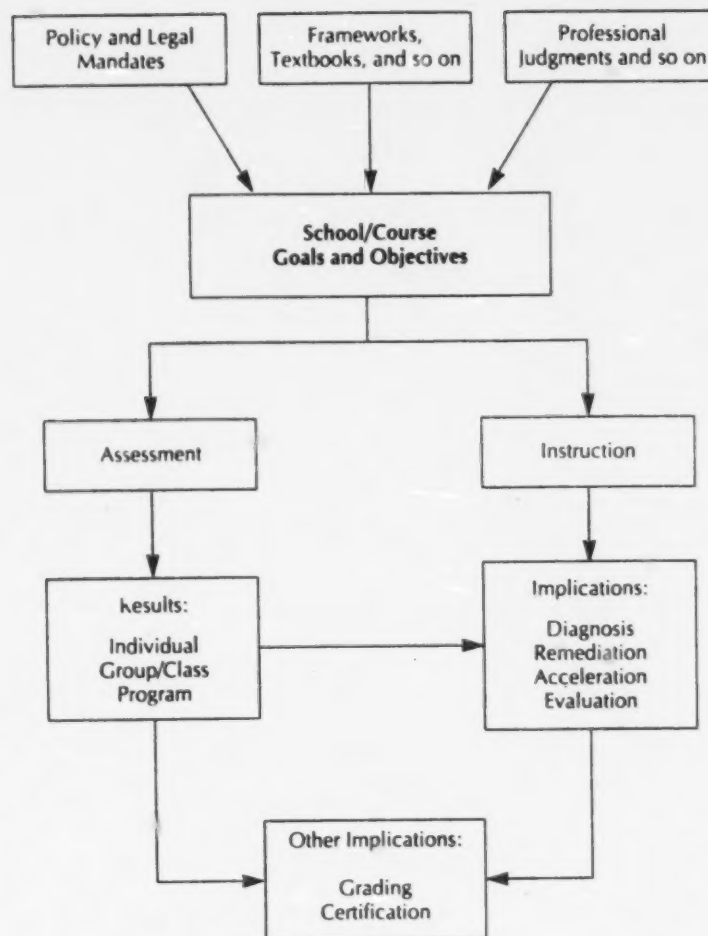


Figure 3. Assessment Alternatives.

Other assessment models from the Nova University
Core Seminar on Research and Evaluation and the

Curriculum and Program Planning Seminar also can be used as outcome measures. In particular, the work of Stufflebeam (1971) included a cybernetic model of "context-input-process-product" evaluation which results in a continuously revolving evaluative process. In effect, this is much like using an ongoing approach to formative and summative evaluation, followed by formative and summative evaluations in a synergistic process along a time continuum.

The third model is reminiscent of the previous two in that "continuous process improvement" is a stated goal of Total Quality Management according to Deming (Shirkenbach, 1988). This approach, synthesized with the others previously mentioned, can offer a continuum of measurement for distance education when it is studied as an ongoing process.

Kaufman and Hirumi (1992) used the Deming model directly in educational assessment. This model (See Figure 4) can be used to assess the outcomes from a distance educational approach at the institutional, class, or practicum level. As there are no geographic boundaries, this can be used internationally.

Framework for Total Quality Management Plus

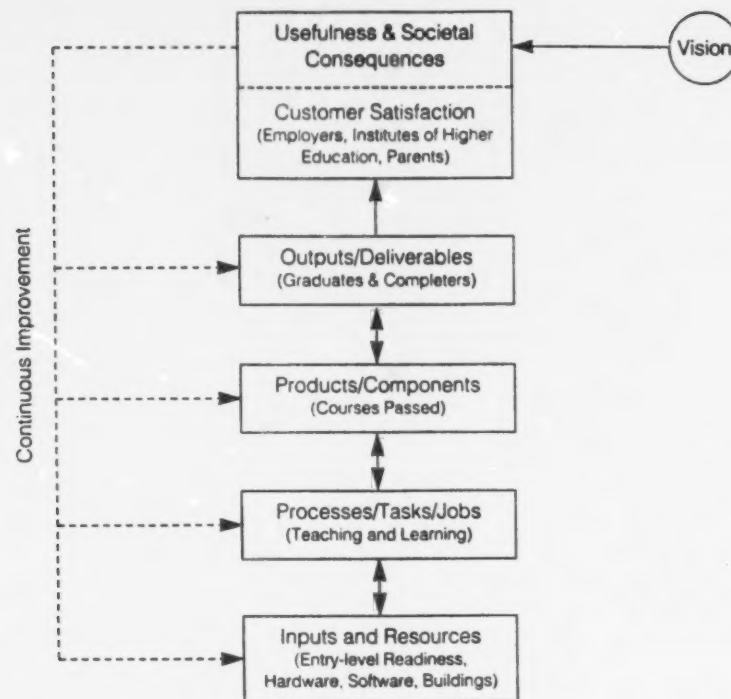


Figure 4. Framework for Total Quality Management Plus.

Methodology

The methodology for evaluating the effectiveness of distance education would employ techniques from the Nova seminar on Research and Evaluation. Using an ex post facto design which employed the use of a Likert-scale questionnaire, data could be gathered about the effectiveness and satisfaction of students with the distance education format. This could be accomplished by a series of questions which measured their responses. A simple pre-test and post-test design

could be used with comparisons being made between attitudes prior to and following a common experience.

Comparisons could be drawn using statistical measures such as the Chi-Square test. Based upon the initial experience, these testing procedures could be repeated with new groups of students following perfection of the schema in which the distance education programs were presented. Over time, comparative data could form the basis for the establishment and funding of additional distance education programs.

CONCLUSION

Based upon standard research procedures, evaluations of the effectiveness of distance education can be designed. According to writers like Verduin and Clark (1991), outcome studies on the effectiveness of distance education approaches have provided results at least equal to traditional methods of teaching. As with many innovations of this kind, additional research will prove important to the acceptance of distance education in the future.

Letter from North American Field Educators and
Directors Network

SCHOOL OF SOCIAL WORK
425 Henry Mall
University of Wisconsin-Madison
Madison, Wisconsin 53706-1501

Field Education Program
Dean Schneck, Field Director

(608)263-4813
fax: 608-263-6211

September 22, 1992

Jack Conklin
217 Ridge Road
Middletown, CT 06457

Dear Jack:

I enjoyed our conversation the other day, as I did receiving your letter in July. After we talked, something started percolating in my head and connected with some other observations and opinions. So I went back and reread your letter of July 20 and it coalesced. So for whatever it's worth. . .

Your assertion that field has to change so rapidly with the shifts in clinical and social problems while class is mandated to teach ethics and advocacy but cannot "speed up"--I think you're onto something important here. I've said to a number of colleagues recently that we're now in a situation where the practice community is actually ahead of the university with reference to its response to change. This is not the way its supposed to be, but I think that the typical classroom content--theories, paradigms, research, etc.--has to go through such a protracted period of validation and replication that by the time the information reaches the student and the practitioner, its out-dated or at least behind the curve in terms of its applicability.

In this conjecture, I see a similarity with the lengthy lead time it takes to get anything published (a year or two) and the lengthy period of clinical testing needed to approve a new drug. Now, of course, the response from the scientific community would be that this degree of care and rigor is necessary so we are not promulgating faulty ideas or approving medicines with bad side effects, etc. While we would all support these cautions, we must be sympathetic to our predicament in field practice and education where we do not have the time and luxury for such lengthy process; or put another way, we are in the position of having to respond to cutting edge dilemmas and problems in the absence of *a priori* verification from the scientific community.

Therefore, your assertion that other professions are using high tech interactive video and distance education methodologies to stay on or near the cutting edge is a powerful point. It, indeed, is where field can lead the way in the identification of clinical issues, problems, resource needs, etc. I have made similar assertions in the "Leadership Opportunity" piece and "Ideal and Reality" piece in our book.

I think the technology offers an opportunity to respond to the inductive nature of field and practice as students and practitioners alike reach for applicable knowledge and guidance. One envisions a "grand rounds" format in which students and practitioners might seek counsel from others with new and emerging problems. Wouldn't it be interesting to have a clinical integrative seminar for field in which students and field educators from around the country or around the world were connected through an interactive video setup and were able to share ideas, information, and experiences in real time.

Thus, could be the emergence of "protocols for practice" which begin with real live field problems, move inductively to the conceptual through the technology linkup and are fed back to the practitioners in the field in very short order. This is a much different paradigm than taking classroom knowledge and seeing if it fits somewhere in the field.

I know I'm rambling, but I think you're really onto something, especially if the technology can be seen to advance the service delivery and knowledge generation potential of field education and field educators. Now, if we could only find a way to package and market all of this and spend more time in Key West . . .

Best regards,



Letter of Support**School of Social Work**

UNIVERSITY OF WISCONSIN — MADISON

425 HENRY MALL
MADISON, WISCONSIN 53706(608) 263-3680 - Admissions
(608) 262-3561 - Director
(608) 263-4813 - Field Program

December 7, 1992

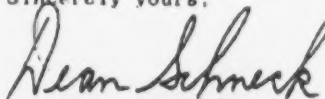
Prof. John J. Conklin
School of Social Work
University of Connecticut
1798 Asylum Ave.
West Hartford, CT 06117-2698

Dear Jack:

We are happy to hear of your intention to complete a survey of field directors in the US and Canada concerning the utilization of audiovisual technologies for distance education efforts in field education. Our field education colleagues have long recognized that basic and advanced field instructor training and communication among field educators, instructors, and directors is crucial in the delivery of quality field education programs. I suspect, as you do, that some field educators and directors are doing some very creative work utilizing distance education methodologies, but, as a whole, the utilization among field educators may be underdeveloped. Of course, the proper way to assess same is to survey our colleagues.

Therefore, we encourage field directors to complete this brief survey. We expect your survey results and your suggestions for broader use of distance education technologies will be of considerable interest to field educators and directors, and we look forward to their presentation at a future forum or conference.

Sincerely yours,

Dean Schneck, ACSW
Director of Field Education
Chair, NA Steering Committee of Field
Educators and Directors

DS:bsz

Appendix F

Letter of Transmittal

January 15, 1993

Dear Colleague in Field Education:

Recently, you received an announcement from Dean Schneck, the Chair of the North American Field Educators and Directors Network that I would be contacting you regarding a survey of the Master of Social Work Directors of Field Education that I will be conducting. The brief questionnaire which was developed concerns the use that schools of social work are making of technology, or plan to make of it, in reference to teaching at remote sites, often called "distance education." The information which will be generated will be used to help the organization prepare for field education and practice in the year 2000.

The enclosed questionnaire was developed as part of a Major Applied Research Project associated with doctoral studies at the Nova University Programs for Higher Education in Fort Lauderdale. Please assist in the development of data by completing the enclosed survey and returning it to me by January 29, 1993. For those of you who have completed surveys of this sort before, I do not need to tell you how important your individual participation is to the success of the project. A self-addressed stamped envelope is enclosed for your convenience.

Thank you for your assistance.

Sincerely yours,

John J. Conklin, ACSW, CISW
Associate Professor

Appendix I

North American Field Educators and Directors Network
Questionnaire

DIRECTIONS: The following questions concern how technology-based distance education is now being conducted by your school, university and field agencies and how your school plans to use it in classroom and field education teaching in the future. Reading from left to right, the answers to the questions may be given as "N"=NEVER, "S"=SOMETIMES, "O"=OFTEN, "F"=FREQUENTLY, and "DK"="DON'T KNOW." Please circle the answer for each question.

1. AT THE SCHOOL OF SOCIAL WORK

- | | | | | | |
|--|---|---|---|---|----|
| a. We use audio tapes for classroom teaching | N | S | O | F | DK |
| b. We make audio tapes for classroom teaching | N | S | O | F | DK |
| c. We use video tapes for classroom teaching | N | S | O | F | DK |
| d. We make video tapes for classroom teaching | N | S | O | F | DK |
| e. The videotapes are broadcast beyond our local campus to | | | | | |

(check)

- Other campuses _____
- Regional area within state or province _____
- Multistate or regional area _____
- National/inter-national area _____

- Other (specify) _____

- | | | | | | |
|---|---|---|---|---|----|
| f. We use video tapes for classroom teaching made by community agencies | N | S | O | F | DK |
| g. We use a fax machine | N | S | O | F | DK |
| h. We use electronic mail | N | S | O | F | DK |
| i. We use voice mail | N | S | O | F | DK |
| j. We use computers | N | S | O | F | DK |
| k. We use modems | N | S | O | F | DK |
| l. We use "compact disc, read only memory" (CD-ROM) technology for literature searches in our library | N | S | O | F | DK |
| m. We use "interactive compact disc" (CD-I) programs | N | S | O | F | DK |
| n. Other technology (specify): _____ | | | | | |
| _____ | | | | | |
| _____ | | | | | |

DIRECTIONS: The following questions concern the college or university with which your School of Social work is associated. Please answer by circling "Yes," "No," or "DK" for "Don't Know."

2. AT THE COLLEGE OR UNIVERSITY LEVEL OF YOUR SCHOOL OF SOCIAL WORK

- | | | | |
|---|---|---|----|
| a. The university has an educational media or technology department | Y | N | DK |
| b. The university has recording studios in which video tapes can be produced | Y | N | DK |
| c. The university has a satellite link, satellite "dishes" and the capacity to receive and transmit meetings, classes, conferences "live" | Y | N | DK |
| d. The university uses these facilities to transmit courses to remote sites | Y | N | DK |
| e. The university has a special program for the teaching of courses for credit by interactive television. | Y | N | DK |
| f. The university uses interactive TV courses through which students call in questions from remote sites by telephone | Y | N | DK |
| g. The university uses interactive TV courses through which students raise questions while they are on TV at the remote site (fully interactive two-way television) | Y | N | DK |
| h. The School of Social Work has never worked with the media department regarding presentations | Y | N | DK |

- | | | | |
|---|---|---|----|
| i. The School of Social
Work has begun to work
with the media department
regarding presentations | Y | N | DK |
| j. The School of Social
Work has worked a great
deal with the media
department | Y | N | DK |

Other comments _____

DIRECTIONS: The following questions concern the use of various forms of technology used by the field education agencies of your school. While there are a range of answers possible as to what technology is being used, what is sought is a general impression of the use of media by the agencies at the present. Again, "N"= NEVER, "S"=SOMETIMES, "O"=OFTEN, "F"=FREQUENTLY, and "DK"=DON'T KNOW. Please circle the answer for each question listed below.

3. FIELD AGENCIES

- | | | | | | |
|--|---|---|---|---|----|
| a. They use audio tapes
for field teaching | N | S | O | F | DK |
| b. They make audio tapes
for field teaching | N | S | O | F | DK |
| c. They use video tapes
for field teaching | N | S | O | F | DK |
| d. They make video tapes
for field teaching | N | S | O | F | DK |

- e. They use video tapes made by your school for field teaching N S O F DK
- f. The videotapes they use are broadcast beyond the agency or hospital to
(check)
- Other agencies in a local area _____
 - Other agencies within the state or province _____
 - Regional area _____
 - National/ inter national area _____
- g. They use a fax machine N S O F DK
- h. They use electronic mail N S O F DK
- i. They use voice mail N S O F DK
- j. They use computers N S O F DK
- k. They use modems N S O F DK
- l. They use "compact disc, read only memory" (CD-ROM) technology for literature searches N S O F DK
- m. They use "interactive compact disc" (CD-I) programs N S O F DK
- n. They have a satellite link, satellite "dishes" and the capacity to transmit meetings, classes, conferences "live" N S O F DK
- o. They use these facilities to transmit to remote sites N S O F DK

4. DEMOGRAPHIC DATA

- a. The School of Social
Work is located in
(check) Canada_____ U. S. _____
- b. If your School is in
Canada, please indicate
your general region (e.g.
Maritime, Central, Great
Lakes, Western etc.) _____
- c. If your School is in the
United States, please
indicate your general
region (e.g. Northeast,
Middle Atlantic, South,
Midwest, Southwest, etc.) _____
- d. Primary region that the
School serves is
(check) Major Metropolitan Area _____
Major metropolitan area
plus regional area
within state _____
Statewide _____
Regional _____
National _____
International _____
- e. The School is part of a
(check) Public University _____
Private University _____
Public College _____
Private College _____
Sectarian School _____

Additional comments _____

Appendix J

The Strategic Plan for the NAFEDN

The North American Field Educators and Directors Network (NAFEDN) is a group of field educators from the Canada and the U. S. who have worked together for the past ten years. The NAFEDN is dedicated to the advocacy of field education issues, field research and scholarship, practice development and the identification of new knowledge. As a result of several years of effort, the Council on Social Work Education (CSWE) recently created the Commission on Field Education to consider practicum issues.

Study Methods and Findings

One year ago, a questionnaire was sent to 50 of the most active members of the NAFEDN. An assessment was made to develop strategic goals for the organization (Conklin, 1992). This was presented to the Steering Committee of the NAFEDN in Kansas City. Several of the findings were:

1. Closer ties should be made with the CSWE. The respondents supported offering input and seeking membership on committees that are most closely related practice issues.

2. The respondents favored the development of additional printed materials such as the book entitled Field Education in Social Work: Contemporary Issues by Schneck, Grossman & Glassman (1991).
3. There was significant support for the setting of prioritized goals for the organization. This was directly related to the idea of setting priorities and goals via strategic planning in which references are made to strengths, weaknesses, opportunities and threats are listed (Groff & Cope, 1988). Setting clear goals, specific directions and providing continuity for the organization were identified as priorities.
4. From the questionnaires, 85% of the respondents favored the integration of theory and practice in field settings. Almost the same number indicated that more training programs should be developed for field instructors. Also, more regional conferences should be instituted. Closer relationships between schools and social agencies should be established.
5. Finally, under questions about practice issues and curriculum issues which should be emphasize, the top issues suggested by the data concerned ethics, violence, and substance abuse. Other related issues

were the rapidly changing nature of social work practice, the implications of AIDS, and the many issues regarding homelessness.

Recommendations were made that came directly from the above findings. The Steering Committee should work more closely with the CSWE. The Steering Committee should continue to work on institutional and curriculum issues regarding field education. Special practicum materials should be developed using the new technology. It was suggested that this could include the production of lectures and seminars on field education, professional publications, and regional conference results serving as a basis for texts. It was also suggested that several videotapes for teaching about field practicum topics should be developed for showing via distance education.

Vision of the Future

Following the discussion of the strategic plan assessment, one of the specific requests from the Chairman of the NAFEDN was to develop a technology display to show at the next Field Education Symposium of the CSWE Annual Program Meeting in New York City. Accordingly, a 15-minute videotape was produced which

illustrates several use of a technology-based distance education approach. The applications were at the local, national, and international levels.

The first portion of the tape shows the use of distance education in the classroom. That segment concerns the work of Dr. Joanne Jennings and Dr. Elbert Siegel of the Southern Connecticut State University School of Social Work in New Haven.

The second portion is a demonstration of distance education used nationally to introduce field instructors to the latest findings on psychopharmacology. This is the work of Professor Mary Francis Libassi at the University of Connecticut School of Social Work.

The final section concerns the work of Ron Gould, a social worker who has produced documentaries on social work issues which are shown nationally and internationally. The topics concern issues such as runaway teenagers, dysfunctional families and AIDS.

The executive producer of the videotape is Professor Jack Conklin of the University of Connecticut School of Social Work who also did the introduction and conclusions to the tape. This was shown at a workshop

entitled "Field Education Teaching About Diversity Through The Use of a Technology Handbook and a Videotape Presentation."

The findings of the study on strategic planning led to further questions about class-field integration, the rapidly changing nature of social work practice and the need to continue to address field education issues.

As a result of practicum studies and literature searches done as part of a doctoral program in the Programs for Higher Education at Nova University, a questionnaire was developed about distance education and social work practice.

A questionnaire was sent to 124 American and Canadian graduate school directors of field education. Questions were raised as to the use of technology, specifically distance education, and the use of telecommunications at the various schools. The preliminary findings are that social work schools are just beginning to make use of interactive television. Many campuses have educational media centers, but social work schools, for the most part, have not begun to network with them toward the production of class and field videotapes or live performances regarding the integration of theory and practice.

SWOT Analysis

Based upon the analysis of the strengths, weaknesses, opportunities, and threats inherent in organizations (Groff, 1988), studies can be made to forecast future planning. The following analysis was done related to the history and future of the NAFEDN.

Strengths

The NAFEDN has grown in complexity and influence over the past decade. It has strong leadership in the form of an articulate, forthright, energetic chairman who has solid management support from his administrative associate. Records are kept on a computerized system and mailings are made frequently.

Another strength is the dedication and vitality of the Steering Committee composed of 14 of the top leaders of field education in Canada and the United States. All are bright, highly educated, and motivated. Many have a number of publications to their credit.

The Field Education Symposium held each year is a tribute to the field of social work education. Many papers presented at that forum are published.

The recent move by the CSWE to form a permanent Commission on Field Education provides organizational

endorsement. This will offer a platform upon which issues regarding academic requirements, accreditation and field education issues can be built.

Weaknesses

Perhaps the most outstanding weakness of the NAFEDN is a lack of fiscal resources. All of the work is done on a voluntary basis. Since all active members are faculty and staff of schools of social work, they have access to the resources of their schools for telephones, fax machines, mailings and duplication of printed materials. However, the organization itself does not have independent financial support to provide regional meetings, travel or lodging.

Several answers can be developed similar to the recent publication of a book by Schneck, Grossman, and Glassman (1981). The proceeds from the sale of that book were used for the purpose of strengthening the organization. Further books could be produced for additional income.

Videotapes could be created for sale by the organization. In addition, communication by the organization could be established through conferences held by interactive television. Classes could be

taught by master teachers from the organization for some remuneration. Ultimately, grant monies could be sought by the organization.

Opportunities

There are a number of important opportunities developing for the NAFEDN. The very fact that the organization has both continued to exist and has started to flourish over the past 10 years is a major accomplishment in itself. Now that official recognition of the importance of field education has been gained, the NAFEDN can develop even greater influence on behalf of practicum education.

Linking technology to field education in various practice settings is an opportunity which can be developed in several ways. Local interactive teaching can be done between schools and social agencies. National programs on educational topics emanating from field education can be developed and presented at many national conferences. "Live" discussions in real time can take place on a variety of practice topics over the next several years. Topics such as AIDS, homelessness, domestic violence, families at risk and various types of substance abuse can be discussed.

A videotape library should be established in which footage of major presentations at national conferences can be recorded and reproduced for sale as other professions have done. Tapes can be preserved for archival and historical purposes.

Related to this, much research can be done on outcome evaluations, the effectiveness of teaching via interactive television, and distance education. Studies about the changing styles of teachers after they begin to use distance education can be done. Additional studies can be developed for teaching students in field education placements.

Threats

Several of the potential threats to the organization concern the need to guarantee continuity in leadership. As key members of the NAFEDN retire or take different employment, the organization will be altered. On the other hand, there is no shortage of capable leaders within the organization as a whole so this does not seem to be a major consideration.

Perhaps a more significant threat would be from the leadership itself. It needs to continue to be vital and involved, concerned with change agency, and willing to try the latest educational innovations. In

this sense, the leadership itself can be affected by some of the same cautiousness that the social work profession has demonstrated in the past toward trying out new approaches. Many times, other professions have pioneered practice approaches and theories that social work has replicated. The profession needs to do more innovation and research to validate some very important approaches to education, and the handling of social issues as the national becomes more diverse. Demographic changes need to be predicted and accommodations made to the changing nature of society.

For social work to become more vital, it is very important to exchange information more rapidly and use more innovation for services to students and clients. The profession can continue to grow and prosper if it will take on an even more expansive, global, whole-world perspective as it moves into the advanced information age.

Major Recommendations

On the basis of the completion of a Major Applied Research Project for Nova University, specific recommendations can be made. Several follow.

- a. It is recommended that the Steering Committee of the NAFEDN begin an active development process over

the next five years. This includes creating a detailed strategic plan which will be circulated to the membership at all schools of social work in Canada and the United States.

b. It is recommended that a Technology Committee be established by the Steering Committee which will focus on field education opportunities and work collaboratively with committees of the CSWE.

c. It is recommended that as part of that process, all field education departments in undergraduate and graduate schools of social work be introduced to distance education as a support to social work practicum education.

There are a variety of applications to both agency practice, field education supervision, and classroom teaching. Geographic distance is not a deterrent. Therefore, many functions now carried out at the main campus such as the education of new and experienced social work supervisors could be completed at the work sites which can receive satellite, fiberoptic or microwave transmission of programs. Detailed information from literature searches, conversations with experts, visits to sites which use distance

education, and results from training programs are available for additional practical applications to field education.

d. It is recommended that sources of permanent funding for NAFEDN be sought. These can be through the sale of new texts, videotapes, conference proceedings, or grant proposals for telecommunications on behalf of specific client groups.

e. It is recommended that the funding be used, in part, to provide for travel during the year so that that the leadership of the organization can begin to visit some of the regional groups of the NAFEDN which are beginning to form.

Discussion

The following concerns the above suggestions considered first from an optimistic, then pessimistic point of view. The third rationale is presented from a realistic or middle position.

Optimistic Scenario

An optimistic scenario is that the Steering Committee will endorse the idea of introducing distance education to field education. Over the next five years, programs could be sponsored at the Field Symposium which would demonstrate the application of

distance education to practicum education. Other practice-based professions such as education, nursing, culinary arts, and psychology are beginning the use of this medium in clinical teaching. Social work education needs to consider this as a viable support to class and field teaching.

Pessimistic Scenario

A pessimistic view of the above would be that because of weak leadership, fiscal problems, concerns about confidentiality, or other reservations such as lack of technical knowledge, little will be done to incorporate distance education with field education. Or, field educators will stall in their attempts to apply the medium to practicum education and it will only be used to transmit classroom presentations via interactive television to field agencies.

Concerns about confidentiality can be handled technically through various videotape devices which disguise the appearance and voice transmission of subjects. Also, some clients are willing to give permission to be shown on television as an assistance to others who may have experienced the same problems.

Technical problems can be overcome by learning technological approaches through the media centers of

colleges or universities or through public access cable stations. For example, at the University of Connecticut School of Social Work, students are placed at the Connecticut Public Broadcasting Station for a field placement where they learn the production of videotaped documentaries related to social issues of the day.

Realistic Scenario

This year, the Field Symposium had a demonstration of video technology for the first time. Encouragement could be given to others in the next several years, to produce additional videotapes about practice-related techniques and methods of teaching. Just as the CSWE is presenting computer-based programs at the Annual Program Meeting, the Field Symposium could continue to encourage the presentation of videotapes. Gradually, a collection of tapes would be developed which could be duplicated and shared throughout North America. Ultimately, they could be sent to other countries in Europe, South America and the Pacific Rim. Also, a number of third world and developing countries could be reached with the technology.

Plan of Action: Realistic Scenario

Goals

- a. Have the Steering Committee endorse, in principle, the idea to work on the development of interest in distance education in all North American schools of social work.
- b. Establish the Technology Committee to begin to work on details of how to initiate the above goals over the next year, prior to the next Annual Program Meeting in Atlanta, 1994.
- c. Charge the Technology Committee with the responsibility for attempting to work closely with any committees developed by the CSWE to initiate technology-based education.
- d. Study the findings of the recent questionnaire sent to Canada and the United States in greater detail, to determine how best to complete a strategic plan over the next five years.
- e. Begin to consider how videotapes could be produced, duplicated, and sold to the educational community through Field Works, Incorporated. This is the company which was founded to produce the first field education textbook edited by Schneck, Grossman, and Glassman.
- f. A detailed report should be produced about the various uses of distance education in social work

education. This can be discussed extensively at the next meeting of the Steering Committee of the NANFEDN, which will be held in Atlanta, in 1994.

g. Evaluative measures should be built into the process so that formative and summative studies can be done in the future.

h. Information about this process should be widely shared with the membership schools of the NAFEDN, the leadership of the CSWE and the Deans of the schools of social work in Canada and the United States.

REFERENCES

- Conklin, J. J. (1992, March). A Report to the North American Field Education Directors Network Steering Committee. Unpublished report. Kansas City, MO: Annual Program Meeting, Council on Social Work Education.
- Groff, W. H., & Cope, R. G. (1988). Achieving excellence through strategic planning. (ERIC Document Reproduction Service No. ED 298 977)
- Schneck, D. Grossman, B., & Glassman, U. (1991). Field Education in Social Work: Contemporary Issues. Dubuque, IA: Kendall/Hunt.

BIOGRAPHICAL SKETCH OF STUDENT

John J. Conklin is currently employed at the University of Connecticut School of Social Work in West Hartford, Connecticut, as an Associate Professor. He teaches graduate level courses in social casework, mental health and psychotherapy. He has been at the School of Social Work for 16 years. For 15 years, he was the Director of Field Education and is known nationally for his work in practicum education. He maintains an active private psychotherapy practice in Portland, Connecticut.

Prior to his employment at the School of Social Work, he was the Associate Director of Psychiatric Social Service in the office of the Connecticut Commissioner of Mental Health. He was named as one of the top 100 mental health administrators in the country and was selected to be part of the NIMH Leadership Training Program in Chicago. Concurrently he was a Special Lecturer in social work at a local university Bachelor of Social Work program.

Earlier, he spent a year working for the Ministry of Health in England where he was a psychiatric social worker and supervisor of social work students. Just prior to that, he was a Psychiatric Social Work at

Connecticut Valley Hospital, in Middletown. He has a Master of Social Work degree from the the University of Connecticut School of Social Work. He has a bachelor of Arts degree from Dartmouth College where he majored in sociology.

He is married and has two adult children. Joyce is an elementary school teacher. Earlier, she was educated as a registered nurse. She was employed as a public health nurse and a school nurse. She returned to college to obtain an associate's degree, bachelor's degree and master's degree and certification in elementary education. Their daughter, Kathleen, is a mental health case manager who has a master's degree in community psychology. Their son, Michael, graduated from college with a major in technology and communication. He is presently working with an international shipping firm.